Los Angeles Unified School District

Education Technology Plan

July 1, 2009 - June 30, 2012

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"The biggest issue schools are grappling with is the totality of the technology landscape. Technology is changing very rapidly. There's an emphasis on data and accountability that has driven a lot of emphasis on data and data systems … school districts we've been talking with are wrestling with … how do you bring that all together… how do we leverage the potential we have in this technology for us to understand how students are doing and be able to reach them, and how do we maximize that, how do we capitalize on that in ways that are both scalable and sustainable? … What we've seen from other sectors of the economy is that it's really only when you look at what you would think of as the core business, and then how can technology really support those goals, that you begin to have the kind of conversations that we've seen successful schools and districts around the country begin to have. It's when they're applying technology in ways that help them meet their strategic aim and are willing to align their practices in ways that leverage what the technology is uniquely able to offer..."

Timothy J. Magner, Director of the U.S. Department of Education's Office of Educational Technology, Education Week, May, 2008**.**

i. DISTRICT PROFILE

Los Angeles, California, is the second most populous city in the United States with an estimated 2007 population of 3.8 million. The city's 470 square miles contain 11.5% of the area and 38.8% of the population of the County of Los Angeles.

In 2007, for the employed population 16 years and older, the leading industries in Los Angeles city were educational services, health care and social assistance (combined at 18%) and professional, scientific, management, administrative and waste management services (combined at 14%). Other significant industries include the arts, entertainment, recreation, accommodation and foodservices (11%); retail trade (10%); and manufacturing (10%.)

In 2007, the average unemployment rate of the residential labor force was 5.6% (slightly higher than the average of 5.4% for the state of California and a full point higher than 4.6% in the U.S).

The Los Angeles Unified School District (LAUSD) administers public instruction for grades PK-12, adult, and occupational schools in the city and all or significant portions of a number of smaller neighboring cities and unincorporated territory. LAUSD encompasses approximately 710 square miles and is governed by a seven-member Board of Education, elected by voters in eight (8) local districts to serve alternating four-year terms.

As of September 2007, the total District budget is $13.986 billion.

LAUSD operates 878 K-12 schools and centers including 436 elementary schools, 75 middle schools, 64 senior high schools, and 138 magnet centers. One hundred ninety-four (194) other schools and centers (community adult, early education, state preschools, ROP and skills centers) are also governed by the District. LAUSD has jurisdiction over an additional 119 independent

K-12 charter schools and centers. The plan to discontinue year-round schools is driving new school openings at an average rate of ten to fifteen per year. The primary goal of new construction is to provide a two-semester, K-12 neighborhood school seat for every student in LAUSD. Achieving this goal allows the District to reduce class sizes to agreed upon limits at all grade levels, provide special education facilities as mandated, provide pre-kindergarten facilities and reduce the reliance on portable classrooms. LAUSD is currently engaged in the largest school building program in District history. Over the next ten to twelve years the District will complete the construction of 155 new schools at a total estimated cost of approximately $11.2 billion. Funding has been identified from various sources, including state and local bonds and developer fees.

According to 2008 CBEDS data, the District's K-12 student population is 693,680. The District employs 35,785 K-12 classroom teachers (over 45,000 total certificated) and 38,177 classified staff members. The following chart shows the District's population by ethnicity:

Population	Amer. Indian	Asian	Pacific Islander	Filipino	Hispanic	African American	White	Multi/ Not given	Total
Students	2,118	25,525	2,573	15,788	506,232	75,777	61,270	4,397	693,680
Teachers	227	3,245	117	998	10,947	4,312	15,830	109	35,785
Staff	178	1,638	113	1,199	19,358	9,354	5,969	368	38,117

The largest student ethnic group is Hispanic (72.8%), of which about half are considered English learners.

The DataQuest, 2007 Base API Report for demographic characteristics shows the percentage of District students receiving free and reduced lunch is 77%. Special education students comprise about 12% of total enrollment; GATE (Gifted and Talented Education) students are 11% of enrollment.

In 2007-2008, the 35,785 K-12 teachers had served an average of 10.7 years in the District (11.3 years total in education); 8% were in their first year of teaching; 7% in their second year; and 91.2% were fully credentialed. 2007 CBEDS indicates 32.1% of the Los Angeles Unified staff hold a master's or higher degree.

District Vision:

Every LAUSD student will receive a state-of-the-art education in a safe, caring environment, and every graduate will be college-prepared and career-ready.

District Mission:

The teachers, administrators and staff of the Los Angeles Unified School District believe in the equal worth and dignity of all students and are committed to educate all students to their maximum potential.

Student Achievement:

LAUSD has made significant progress over the last six years. One high school is ranked in the top 50 nationally. In addition, one elementary school ranks 10th in the State, and LAUSD has the only school in the State to win the triple crown – the Title I Distinguished School, the California Distinguished School, and the U.S. Department of Education No Child Left Behind (NCLB) Blue Ribbon Award.

LAUSD has dual language and international schools that teach languages such as Mandarin Chinese, Japanese, Korean, and Spanish. There are schools that are already meeting the State's Academic Performance Index (API) goal for the year 2014. The District has 111 schools with an 800 API or higher, with 19 of those schools with a 900 or higher API. Overall, District elementary schools are exceeding the State's API progress rate.

In 2007-2008, LAUSD is in Year 3 of Program Improvement (PI) having met 43 of its 46 Annual Yearly Progress (AYP) criteria in Spring 2007. District-Wide, 33.4% of students scored at or above proficient on the AYP Annual Measurable Objectives in English language arts; 38.8% scored at or above proficient in mathematics. English learners and students with disabilities scored below the target in English language arts; the graduation rate target was not met. The following charts show data from the 2007 Accountability Progress Report.

	Overall AYP Met?	AYP Eng/LA Met?	AYP Math Met?	API Req. met?	Gradua-tion Rate	PI Status
Los Angeles USD	NO	NO	YES	YES	62.8	In PI

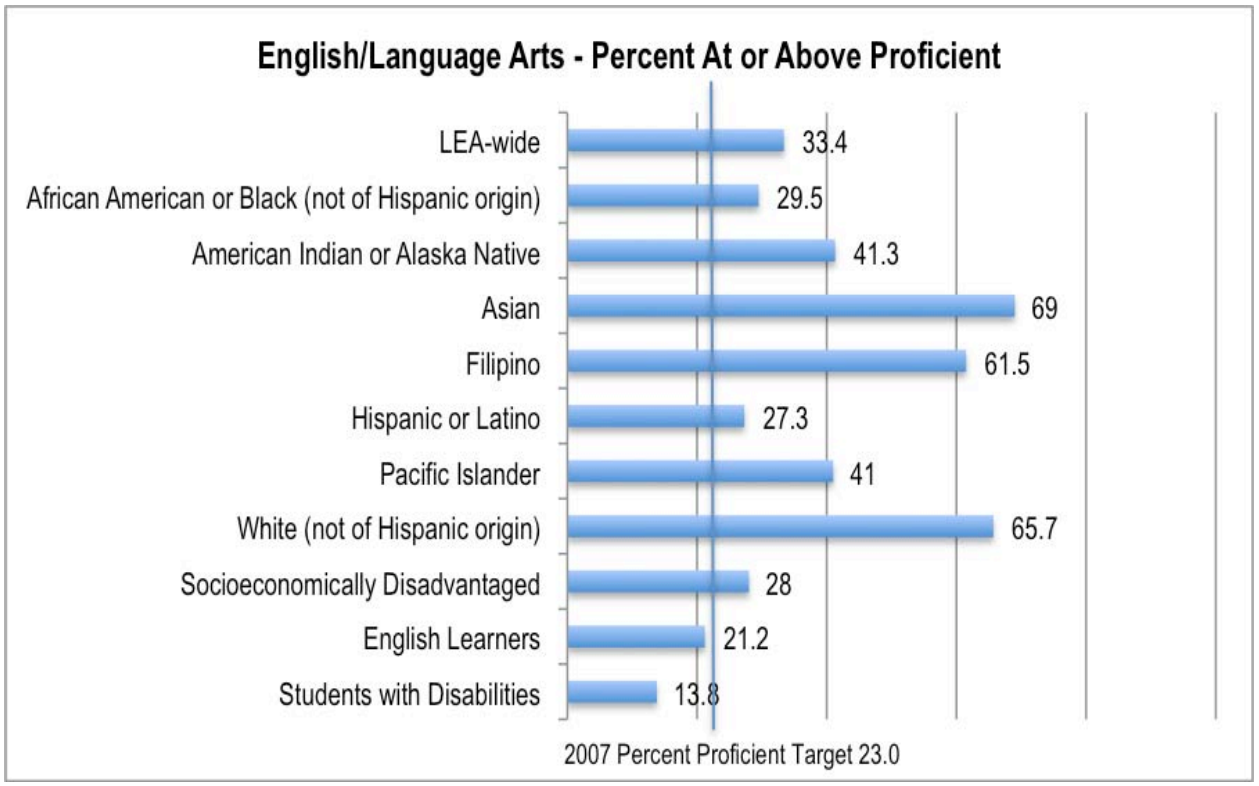
LAUSD increased the overall API from 655 in 2006 to 664 in 2007, an increase of 9 points. Every subgroup's API score increased, ranging from 2 points for white students to 11 points for both Pacific Islanders and students with disabilities.

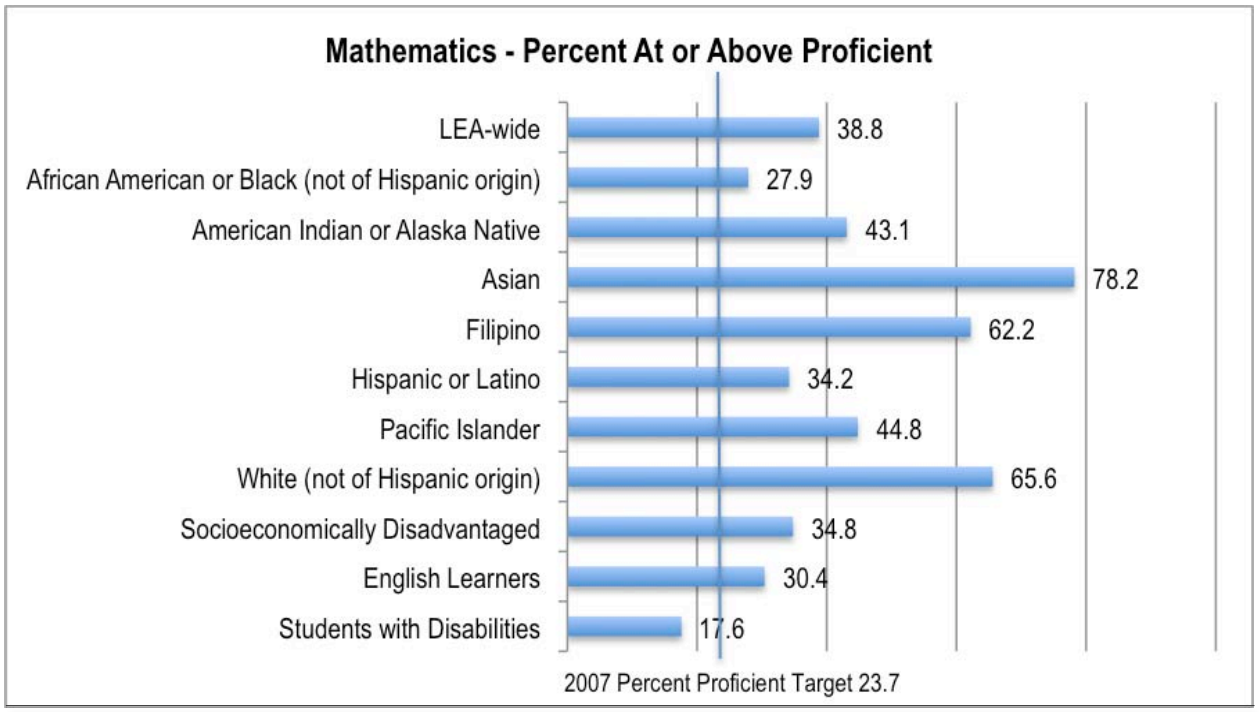
The table below compares LAUSD and the State in the number and percent of schools in each of the following categories: schools that met their targets; schools where their API grew but did not meet their growth target; and schools where their API remained the same or declined, or where targets were not met.

2007 Number and Percent of Schools Meeting API Growth Targets—LAUSD and California

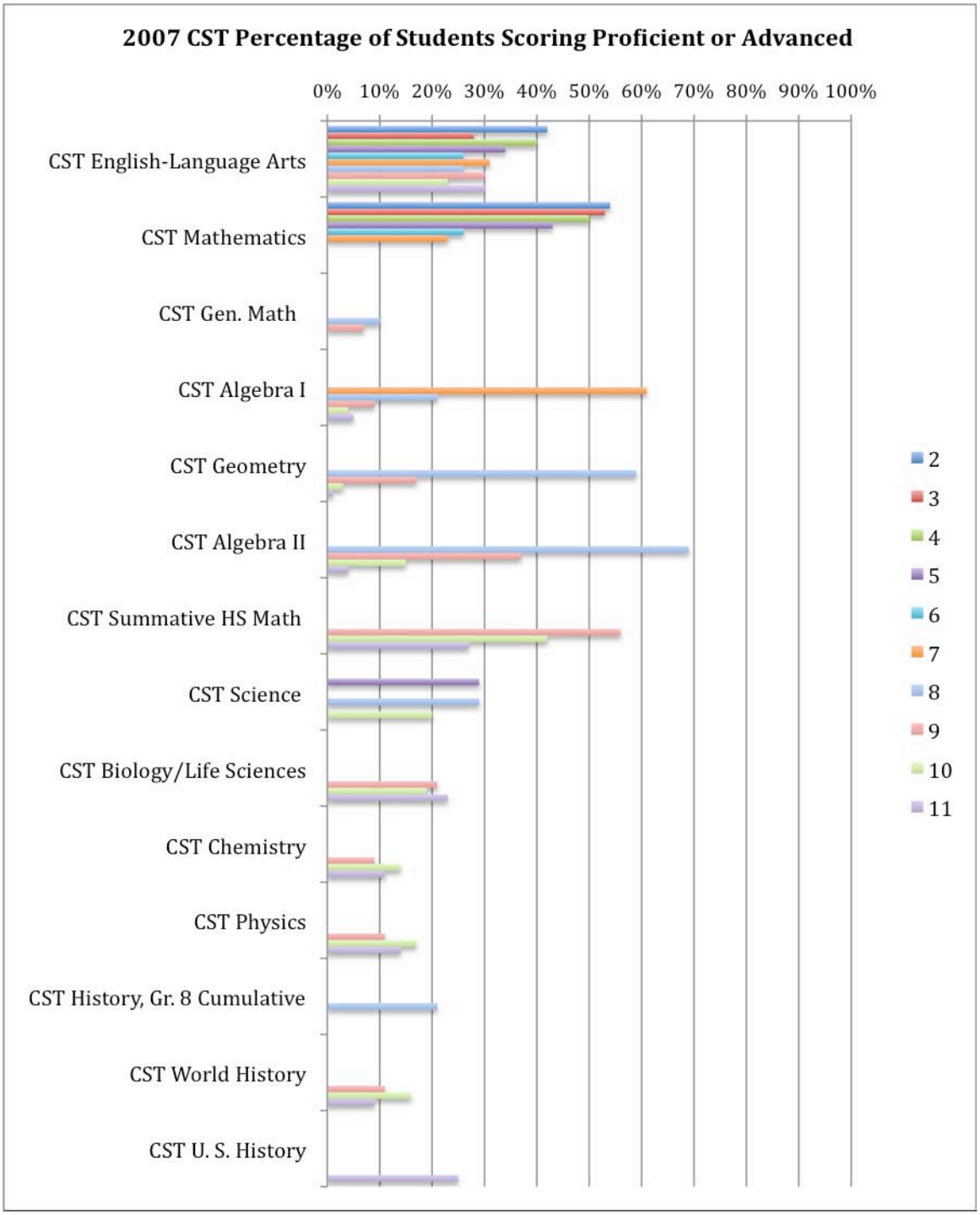
	All Schools				**Decile 1 and 2 Schools**			
	# of Schools		**Percent**		**# of Schools**		**Percent**	
	LAUSD	**State**	**LAUSD**	**State**	**LAUSD**	**State**	**LAUSD**	**State**
Targets Met	277	3,639	44%	45%	104	756	46%	46%
API Grew, Target Not Met	162	1,743	27%	21%	84	458	37%	28%
API Same or Declined, Target Not Met	158	2,640	26%	32%	40	435	18%	26%

The charts below show the percentage of students in subgroups District-Wide scoring at or above Proficient on the tests used to determine Annual Measurable Objectives for AYP.





As previously noted, the number of students in Grades 2 through 11 scoring proficient or advanced on the California Standards Test has improved in multiple curricular areas. The following chart shows selected results from the 2007 California Standards Tests, by CST Test type and grade level, across Grades 2-11 and across multiple key subjects:



1. PLAN DURATION

This plan will guide Los Angeles Unified School District's use of technology for the three-year period from July 1, 2009, through June 30, 2012. It serves as both the Enhancing Education Through Technology (EETT) education technology plan and the E-rate technology plan for the District. The plan is centered on applying technology to meet the District's strategic goals and aligning practices to leverage what technology is uniquely able to offer.
The Los Angeles Unified School District will make every effort to accomplish the goals set forth in this plan, subject to the District's annual budget and determinations made by the Board and Superintendent on appropriate funding distribution. On an annual basis, LAUSD staff will review progress and make adjustments accordingly based on budgetary restrictions, policy decisions, and any other unforeseen factors. Should these budgeting forecasts change at any time because of budget restrictions, revised policy, changes in the Board's or the Superintendent's priorities, changed circumstances, or other similar factors, the goals identified in this plan and/or their implementation will be reviewed, modified, deleted and/or supplemented, as appropriate.

2. STAKEHOLDER'S INVOLVEMENT

The Los Angeles Unified School District (LAUSD) 2009-2012 Education Technology Plan (Plan) aligns with all applicable aspects of the Superintendent's guiding principles, strategic goals and system-wide initiatives. The Education Technology Plan further defines the technology strategies to use in conjunction with the District's current educational programs.

This Plan will assist District staff in identifying strategies to help schools provide every student with the most appropriate learning technology resources and contemporary learning opportunities in alignment with the overall District goals for academic achievement and other key District initiatives. It will support school board and other District, local district and site-based leadership in making timely, informed, and student-centered decisions. The outcomes of the Plan will underscore the major benefits of technology use for students, parents, teachers and administrators within LAUSD.

The LAUSD 2009-12 Education Technology Plan (First Draft, initial phase May-June, 2008) was developed at the same time as the other key District-Wide plans, such as the LEA Plan and the District's June 2008 tactical Plan of Action. A wide range of District stakeholders, including representative teachers and administrators from schools, local districts, and central office, were part of the development process for these plans. In addition, data from approximately 66,000 LAUSD students, 14,000 LAUSD teachers and 550 LAUSD administrators was obtained from Ed Tech Profile to further inform the process. Tech Ed Services, Inc. assigned project team staff members and provided overall Plan facilitation for the First Draft, initial phase. Document review/feedback was communicated by the Los Angeles County Office of Education, CTAP Region 11.

Plan stakeholders who participated in the second phase (July-September, 2008) included: 740 local district stakeholders (comprised of elementary, middle and high school parents, students, classroom teachers, teacher librarians, and administrators from each of the local districts, as well as local superintendents); several newly appointed 2008-09 District staff; and community representatives from the Education Technology Alliance of Los Angeles, who participated in the planning process via Plan-related meetings, online/phone conference sessions, and/or online surveys through September 2008. Tech Ed Services, Inc. continued to provide overall Plan process and document facilitation, refined data and synthesized new input received during this phase, and duly incorporated initial phase document recommendations received from key District stakeholders and from the Los Angeles County Office of Education, CTAP Region 11, into the Plan's final version.

3. CURRICULUM COMPONENT

3a. Teachers' and students' current access to technology tools both during the school day and outside of school hours.

The goal of the Los Angeles Unified School District is to provide equal access to high quality instruction and instructional materials for all District students. The California K-12 High Speed Network (K12HSN) Datalink reports that 100% of the District's schools are connected to the District and the Internet via the K12HSN network, and all classrooms have Internet access, with individual sites averaging between one and four T-1 lines and DSL service in bungalows.

All students and teachers have access to technology in their classrooms, labs, and library media centers. All classrooms are connected to the Internet. All schools have at least one fixed or mobile computer lab, and many libraries have a bank of computers. Numbers of computers for student use in classrooms vary, depending on each school's resources and priorities,

According to the 2008 California School Technology Survey, 99.6% of LAUSD school sites have computers in classrooms; while 66.3% have fixed labs, 88.5% have computers in libraries and 64.8% have mobile labs available for instructional use. Most LAUSD teachers have access to a District computer dedicated to their use.

Classroom computers are available for student use before and after school by teacher permission. Students can participate in the Beyond the Bell (before/after/Saturday school) at all elementary and middle schools. LAUSD has made a commitment that all students within the District have access to high quality, safe and supervised educational, enrichment and recreational programs that engage and inspire learning and achievement beyond the regular school day.

Beyond the Bell (BTB) Branch carries that commitment by connecting students and youth to their home, school and community through a variety of programs that are provided and operated by the District and its partner agencies before and after school and on Saturdays. Technology use in this program varies by school, depending on the technical expertise of and resources available to program staff.

LAUSD school libraries are staffed by Teacher Librarians and classified staff. The libraries have flexible schedules, based on site decision, e.g., students may come during the day with a pass from the teacher and are typically available to students a half hour before and an hour after school and during lunch; libraries average between 5 and 20+ student computers/laptops on carts.

Several subscription databases are currently available to all LAUSD students via the Internet within and outside of school including Britannica, World Book, Grolier reference sets; and ABC-CLIO, a broad online collection of history encyclopedias, handbooks, dictionaries, and guides.

Twenty-nine middle schools have thus far received Enhancing Education Through Technology (EETT) competitive grant funding which provided additional carts with laptops and printers to rotate, as needed, in middle school mathematics and science classrooms, along with laptops and LCD projectors for teachers, interactive white boards, and other electronic learning resources for targeted math and science instruction.

The following chart shows per-District ratios of students to instructional computers and students to "up-to-date" computers (those 48 months old or less) in Spring 2008, per 2008 enrollment and the 2008 State Technology Survey, including numbers of computers at various locations on site:

Student Enrollment	Total Computers	Student: Computer Ratio	Up-to-date Comp. <4 yrs	Student: up-to-date Comp. Ratio	# of comp. in class-rooms (all types of comp.)	# of comp. in labs	# of comp. in libraries	# of comp. on mobile carts (mobile labs)
693,636	169,739	4.09:1	82,085	8.45:1	98,312	29,051	5,127	31,959

While schools exist in LAUSD where more than 50% of the student population does not have a computer or access to the Internet from home beyond the school day, and such students may not have an opportunity for the additional practice to gain the level of technology skills that their peers with home access might have achieved, most students can utilize computers with Internet access for public usage at local community centers or public libraries.

According to student responses to the EdTechProfile Student Survey in a sampling primarily comprised of middle school students, 55% currently use a computer at home that is connected to the Internet. These students also report using technology at school (74% report using at least monthly, with 58% of those using once a week or better), having some level of proficiency using basic tools (70%), multimedia tools (63%), communications tools (73%), and problem solving tools (62%).

About 13.8% of LAUSD school sites have video conferencing capabilities, 12.1% own handheld computers for instructional use and 16.1% have student response systems available to their classes, according to the 2008 State Technology Survey.

All classrooms have access to at least one printer. As determined by site, schools have varying numbers of peripherals and recording devices such as televisions, DVD and VHS players, scanners, LCD projectors, digital still cameras, and digital video cameras. The wide array of peripheral devices installed in classrooms throughout the District includes printers (color, black and white, standalone, networked, inkjet, and laser), projection devices (projectors, document cameras, digital white boards), video capture devices (digital cameras, digital video cameras, scanners), calculators (numeric, scientific, graphing), and digital probes, sensors, meters, and microscopes, which are used in many schools within the District.

3b. District's current use of hardware and software to support teaching and learning.

Los Angeles Unified School District uses technology resources extensively to support teaching and learning at all grade levels.

The degree of technology and curriculum integration at the classroom level varies widely across LAUSD. The use of word processing for writing; the Internet for research; spreadsheets for collection, manipulation, and analysis of data; graphic organizers for planning and project development; and multimedia tools for creating presentations, songs, and movies is found in varying degrees across this vast district.

The Microsoft Office productivity suite is one application included as a part of the District-wide software load for all purchases of LAUSD computers. This software package provides, at a minimum, word processing, spreadsheet, and presentation applications for instructional use. A reduced pricing structure also exists for Inspiration, a graphic organizer application that is used across multiple content areas and grade levels and included, for example, in all of the District's EETT competitive grant award purchases at 29 middle school sites to date.

Mathematics programs such as Compass Learning, Bridge to Algebra, Kaplan Essential Skills Program, Revolution Prep, and Cognitive Tutor are used as intervention strategies to support middle and high school students. Math Online by Carnegie Learning and Vantage Learning's MY Access (online writing) are in use at many sites at the secondary level. The Waterford Early Learning System continues to be used in some elementary schools' grades K, 1, and 2 to support English language development as a supplement to the Open Court reading system. READ 180 is used in middle and high schools for students who are reading below the 3rd grade level.

Intellitools, an assistive technology (AT) software toolset for K-8 curriculum support, is utilized to boost the achievement of lower-performing students (struggling students, English language learners, and students with special needs) while High Point is used with middle school ELL students.

The Los Angeles Unified Online Learning Programs provide students access to high-quality, standards-based, content-driven learning experiences that meet their learning needs and expand the boundaries of the classroom. Current online offerings as of Fall 2008 include: Advanced Placement (AP) courses available to students at any high school; selected A-G courses in a blended (online combined with face-to-face) learning environment; and supplemental online course material and virtual learning spaces (Moodle) for teachers and students to expand learning opportunities beyond the traditional classroom. Participation in the LAUSD Online Learning Programs, currently serving 15 schools, 16 teachers, 320 students and offering 32 courses (about 50% of which are AP courses), is expected to grow at least ten fold during the term of this Plan as part of the District's effort to increase graduation rate and support/complement traditional classroom efforts to improve academic achievement (see Section 3d, Action Plan item d).

Videoconferencing is available at some LAUSD facilities, but is currently underutilized. The District would like to see this form of technology used for meetings and distance education for both students and teacher professional development. Other technology topics of interest within the District include RSS technologies (for example, podcasting) and leveraging instruction through digital gaming and social networking.

Career kiosks with career software and college reference materials have been placed in many middle school and high school career centers. The goal is to establish these career kiosks in all high schools so that these resources are available to community members as well as students. The District website includes resources for students, parents/guardians, employees and the community. The website can be used to "Discover LAUSD" and contains information regarding the Board of Education, District initiatives, information, maps, FAQ's, facilities, instruction and general and employment information, lists of offices and schools and many other resources. LAUSD provides free listserv style e-mail subscriptions on various subjects including the District's library automation system, parent and community newsletters, employee health-related

services and information, and the District's student IEP and health/services system. Each school currently maintains its own website, many of which provide staff contact information and subject-specific resource links. The District web site is organized under the District Office of Communications, reporting directly to the Superintendent of Schools. Each local district, division or office provides its own related web content. In 2008-09, schools will be provided with standard templates and processes for ease in providing localized updates for parents in their communities. Currently, only a small percentage of teachers maintain simple webpages connected to school websites, often using SchoolNotes or other methods, for communicating assignments or class resources. All teachers have web-accessible email accounts and all schools use Connect-ED to communicate with parents.

The data for Table 1, Classroom Teacher Technology Use, is from the EdTechProfile teacher Technology Assessment Profile as reported in June 2008. Computers and peripherals are the technologies most commonly used for classroom management (including record-keeping and home/school communication), with 61% of respondents saying they use them daily. Computers and peripherals are also the most commonly used form of technology for classroom instruction, with 68% saying they use them at least twice a week. The most common teacher uses of technology tools at school (at least two days a week) are to create instructional materials (65% of respondents), gather information for lesson planning (59%), and manage student grades and attendance (62%). Technology is used most often for reading/language arts (52% of those who teach the subject use technology at least twice a week), followed by mathematics 44%, science 35%, and history/social science at 32%).

Table 1: Classroom Teacher Technology Use, June 2008
(EdTechProfile Technology Assessment Profile Personal Use Section)
Data is included for 13,698 teachers, 38% of the District total

Technology used for classroom management, record-keeping, home/school communication	Daily	2-4 days/ week	Once a week to monthly	Less than monthly	Avail-able, don't use	Not available
Computers/peripherals	61%	20%	10%	4%	3%	2%
Internet	59%	18%	11%	5%	5%	2%
Email	48%	18%	12%	7%	12%	4%
Handheld electronic devices	12%	6%	8%	8%	10%	57%

Technology tools used for classroom instruction	Daily	2-4 days/ week	Once a week to monthly	Less than monthly	Avail-able, don't use	Not available
Computers/peripherals	44%	24%	16%	7%	5%	5%
Video-based presentation device	19%	19%	30%	17%	9%	7%
Video-based creation tools (video or digital camera)	6%	9%	23%	23%	19%	20%
Internet	31%	22%	21%	11%	10%	5%
Email	25%	15%	15%	13%	24%	9%
Handheld electronic devices	6%	5%	7%	9%	13%	60%

In what subjects are technology tools used for instruction?	Daily	2-4 days/ week	Once a week to monthly	Less than monthly	Never	# of teachers respond-ing
Reading/language arts	25%	27%	27%	12%	9%	8,011
Mathematics	19%	25%	26%	15%	15%	7,486
Science	15%	20%	29%	18%	18%	6,895
History/social science	13%	19%	30%	19%	19%	6,855

How do teachers use technology tools at schools?	Daily	2-4 days/ week	Once a week to monthly	Less than monthly	Never
Create instructional materials	32%	32%	21%	8%	6%
Deliver classroom instruction	23%	24%	25%	15%	14%
Manage student grades and attendance	51%	11%	12%	12%	14%
Communicate with colleagues	26%	25%	21%	14%	14%
Communicate with parents or students	12%	17%	23%	17%	30%
Gather information for lesson planning	27%	32%	23%	11%	7%
Access model lesson plans and best practices	19%	27%	28%	15%	11%

Do you use an electronic student information system to make decisions in lesson design and implementation to improve student academic achievement?	Yes	No	No access
	27%	46%	27%

Use of technology tools to support & improve home/school communication	Daily	2-4 days/ week	Once a week to monthly	Less than monthly	Never
Voice mail	12%	13%	15%	10%	50%
School web site	16%	12%	16%	14%	42%
Video conferencing	1%	2%	3%	6%	87%
Electronic grading system	32%	11%	14%	15%	28%
Online student assessments	6%	7%	20%	21%	46%

Level of teacher familiarity with assistive technologies	Didn't realize these are AT	Familiar, but haven't used	Use/have used in classroom	Can identify student's need for levels of AT
Low-level technologies	28%	32%	25%	15%
Medium-level technologies	20%	50%	18%	12%
High-level technologies	20%	50%	18%	12%

Data for Table 2, Site Administrator Use of Technology, was collected via the 2008 California School Technology Survey, revealing the following technology use among administrators:

Table 2: Site Administrator Technology Use
(2008 California School Technology Survey Data)
Data is included for 100% of school sites, as required.

0	None	None access and use technology tools or processes this way
L	Low	More than zero but less than 25% access and use
S	Some	25% to less than 50% access and use
M	Medium	50% to less than 75% access and use
H	High	75% to 100% access and use

What % of Administrators use technology to:	High	Medium	Some	Low	None
manage school finance or personnel	68%	15%	8%	7%	2%
analyze and monitor student achievement data	73%	15%	7%	4%	1%
assist with instructional leadership, management strategies regarding instructional tech.	39%	24%	16%	17%	4%
monitor professional development needs of their staff	31%	22%	14%	21%	11%
communicate with parents via email	11%	7%	9%	32%	41%
communicate with the District Office or other sites via email	80%	10%	4%	5%	1%
collaborate online with colleagues or in online coursework	32%	19%	16%	23%	10%
research using Internet or CD-ROMs	55%	23%	11%	8%	3%
provide professional development online	6%	7%	15%	28%	45%
use online student assessment tools	42%	14%	13%	18%	13%
present materials electronically	30%	22%	18%	19%	12%

Data for Table 3, Student Technology Use, was generated from the EdTechProfile teachers' Technology Assessment Profile data, as reported in June 2008. Of respondents, 34% said that they assign their students work requiring the use of computers at least twice a week; an additional 27% give such assignments at least once a month. Most common types of technology-related assignments involve reinforcement and practice (55% give such at least once a month), word processing (56%), research (52%), and creating reports or projects (49%). Additionally, 41% of respondents said their students use technology in the classroom to complete assignments; 35% have students use computer labs; 23% reported their students using technology in a library.

Table 3: Student Technology Use
(EdTechProfile Technology Assessment Profile Student Use Section, June 2008)
Data is included for 13,698 teachers, 38% of the District total

How often do assignments require students to use technology tools?						
	Daily	2-4 days/ week	Once a week to monthly	Less than monthly	Avail-able, don't use	No access
Computers/peripherals	16%	18%	27%	18%	12%	9%
Video-based presentations	8%	11%	22%	21%	21%	18%
Video-based creation tools	3%	5%	13%	21%	28%	31%

How often do assignments require students to use technology tools?						
	Daily	2-4 days/ week	Once a week to monthly	Less than monthly	Avail-able, don't use	No access
Internet	13%	16%	24%	20%	18%	11%
Email	9%	6%	10%	13%	35%	27%
Hand-held electronic devices	3%	3%	5%	6%	17%	66%

How often are students assigned work that involves technology?					
	Daily	2-4 days/ week	Once a week to monthly	Less than monthly	Never
Word processing	9%	16%	30%	20%	25%
Reinforcement & practice	10%	18%	26%	18%	27%
Research	6%	15%	31%	22%	26%
Creating reports/projects	5%	11%	33%	25%	26%
Demonstrations/simulations	5%	9%	22%	22%	41%
Correspondence with experts, other schools, etc.	3%	5%	13%	19%	60%
Solving problems or analyzing data	5%	9%	20%	21%	44%
Graphically presenting information	5%	8%	20%	23%	44%

Data for Table 4, Student Technology Use (on the following page), utilizes additional data from the EdTechProfile Student Survey submitted by approximately 66,000 grade K-12 students in LAUSD schools in June 2008, most of which were surveyed in connection with various technology integration projects, primarily at the middle school level.

Table 4: Student Technology Use
(EdTechProfile Student Survey, June 2008)
Data is included for 66,000 students, about 10% of the District total

Your Technology Use	Almost never	About once a month	About once a week	More than once a week
1. In the class where you use technology the most, how often do you use it?	27%	16%	21%	37%
Considering all of your classes, how often do your teachers have you …				
2. Basic tools				
Write reports or other documents using word proc.	36%	34%	20%	11%
Enter numbers into or create a spreadsheet	64%	18%	12%	5%
Create graphs using a spreadsheet	61%	20%	13%	5%
Enter information into or create a database	62%	20%	13%	6%
Search for & sort info & create reports (database)	51%	26%	15%	7%
3. Multimedia tools				
Create pictures using drawing or painting software	53%	20%	15%	11%
Make a video using a video camera	70%	15%	9%	7%
Use digital camera or scanner to get pictures	67%	15%	10%	8%
Create presentation using presentation software	56%	27%	11%	6%
Create a multimedia product using multimedia software	73%	14%	8%	5%
4. Communication tools				
Exchange email with others at your school	70%	12%	9%	9%
Exchange email with classes in other places	74%	11%	8%	7%
Gather information from people using email or online discussions	67%	15%	10%	8%
Create a web page for publication on Internet	77%	11%	7%	5%

Your Technology Use	Almost never	About once a month	About once a week	More than once a week
5. Research and problem-solving tools				
Gather information from CD-ROMs	72%	16%	8%	4%
Gather information using online references	44%	29%	17%	10%
Find info on the Web using search engines	46%	26%	17%	11%
Evaluate information found on the Web	59%	21%	13%	7%
Solve math problems using graphing calculator	57%	20%	14%	9%
Conduct an experiment using probes	72%	16%	8%	4%
Solve a problem using visual learning or systems thinking software (e.g. concept-mapping)	63%	19%	12%	7%
6. Specific Subjects. How often do teachers have you use subject specific software?				
Art	55%	15%	11%	19%
Business	54%	16%	13%	16%
English/language arts	56%	20%	10%	15%
Foreign language	62%	14%	10%	14%
Health	44%	20%	15%	21%
Math	45%	15%	15%	25%
Music	56%	11%	9%	24%
Physical Education	79%	5%	4%	12%
Science	37%	23%	18%	22%
History / Social studies	58%	18%	9%	14%
Vocational	50%	18%	12%	20%
Other	55%	11%	9%	25%

Technology and the Way Your Classroom Works	No	Yes, sometimes	Yes, most of the time	Yes, all of the time
1. In your class where technology is used the most, do students …				
Interact with each other, learning from and with each other?	21%	48%	20%	11%
Solve complex problems, analyze and evaluate information, and form opinions?	29%	42%	20%	9%
Learn by interacting with the world outside of school?	39%	35%	17%	10%
Learn things from more than one subject at the same time (e.g. math and science)?	27%	41%	20%	12%
Show interest in schoolwork?	21%	41%	24%	15%
Get extra help from the teacher when they need it?	19%	42%	22%	17%
Take an active role in learning—where the teacher is more like a coach than a leader?	34%	38%	18%	10%
Get graded on the quality of products created, progress made, and effort put forth?	23%	32%	22%	23%

3c. District's curricular goals that are supported by this Technology Plan.
This Education Technology Plan is aligned to specific District curricular goals as described in multiple District documents, including: the Local Educational Agency (LEA) Plan of June 2008; the Superintendent's Guiding Principles and Superintendent's Strategic Plan for High Priority Schools of June and December 2007, respectively; and the District's tactical Plan of Action of June 2008.

The District's current LEA Plan is for the period 7/1/08 through 6/30/13 and was approved by the governing board on 6/27/08. The District's LEA Plan's five goals are:

Local Educational Agency (LEA) Plan Performance Goals (June 2008)

(LEA1) Performance Goal 1: All students will reach high standards, at a minimum, attaining proficiency or better in reading and mathematics, by 2013-2014.

(LEA2) Performance Goal 2: All limited-English-proficient students will become proficient in English and reach high academic standards, at a minimum attaining proficiency or better in reading/language arts and mathematics.

(LEA3) Performance Goal 3: By 2005-06, all students will be taught by highly qualified teachers.

(LEA4) Performance Goal 4: All students will be educated in learning environments that are safe, drug-free, and conducive to learning.

(LEA5) Performance Goal 5: All students will graduate from high school.

Superintendent's Guiding Principles (June 2007)

(SGP1) Guiding Principle #1: Improve our use of research and evaluation to hold us accountable to an improvement cycle

(SGP2) Guiding Principle #2: Improve the knowledge, skills, ability, and ethical and professional performance of employees on a continual basis

(SGP3) Guiding Principle #3: Improve the use of internally and externally derived innovations to drive a substantial and sustainable organizational change

(SGP4) Guiding Principle #4: Improve our engagement of parents and community in the work of teaching and caring for our children

(SGP5) Guiding Principle #5: Continually improve the physical and emotional safety of the learning environment for children and adults to enhance learning and achievement.

Superintendent's Strategic Plan for High Priority Schools Focus Areas (December 2007)

(SSP1) Curriculum: Use a research-based, coherent, and rigorous standards-based curriculum that meets the needs of diverse learners as a tool that ensures they will be college-prepared and career-ready.

(SSP2) Instruction: Build learning communities in which teachers, and those who support them, use data in a reflective cycle of continuous improvement to develop their skills in delivering high-quality, personalized instruction that ensures learning for all students in all classrooms.

(SSP3) Leadership: Build school and District leadership teams that share common beliefs, values, and high expectations for all adults and students and that support a cycle of continuous improvement to ensure high-quality instruction in their schools.

(SSP4) Organizational and Support Structures: Design and implement District and school organizational support structures to improve school performance.

(SSP5) Parent and Community Engagement: Build at each school a community of informed and empowered parents, teachers, staff, and community partners who work collaboratively to support high-quality teaching and learning.

(SSP6) Physical and Emotional Safety: Build school environments where students and adults are physically and emotionally safe and secure and, as a result, where learning opportunities and personal achievement can be optimized for all.

(SSP7) Reporting, Accountability, and Incentives: Design and implement systems of reporting, accountability and incentives as ways to measure outcomes and promote continuous improvement.

NOTE: In June 2008, the Senior Deputy Superintendent issued a **tactical Plan of Action**, advocating a shift of authority and responsibility to the local districts as well as a call to celebrate and replicate those practices that create successful LAUSD schools, and focused on five specific areas, which are also reflected in the District's 2009-12 Education Technology Plan:

(SDSAP1) Improved academic achievement

(SDSAP2) Improved graduation rate

(SDSAP3) Effective individual counseling for academic, career and personal/social growth in middle and high schools

(SDSAP4) Each school's developing a strong relationship and communication with parents, community and other school connections

(SDSAP5) Students attending safe and orderly schools

The LEA Plan, Superintendent's Guiding Principles and Strategic Plan and District's June 2008 tactical Plan of Action, as applicable, are referenced as Curriculum Links associated with each goal in the Curriculum and Professional Development Components of this Plan.

3d. Technology use to improve teaching and learning by supporting the District curricular goals.

The section that follows describes what Los Angeles Unified School District expects its students to be able to do academically in the core subjects and describes how, through meaningful integration of technology, student academic achievement can be improved. Both teacher use of technology to deliver instruction and student use of technology for learning and presenting their knowledge will be emphasized. Particular emphasis will be on development of student skills in researching, evaluating, using, and presenting information; critical thinking and problem solving; and creativity and originality. It is expected that use of technology will become a regular part of daily school activities for all students and teachers.

The action items listed below are current as of June 2008; LAUSD will continuously research, investigate, pilot, and encourage the use of new educational technologies, innovations and resources as they become available and are shown to improve teaching and learning.

GOAL 3d.1: LAUSD students, teachers and other staff will use technology tools and resources to support the attainment of the District's goals for improving academic achievement and raising the high school graduation rate.

Curriculum Links: LEA Plan Performance Goals 1, 2 and 5; Superintendent's Guiding Principles SGP 2, 3; Superintendent's Strategic Plan SS1, 2, 3, 6 and 7; Senior Deputy Superintendent's Action Plan SDSAP 1 and 2.

	OBJECTIVES & BENCHMARKS:	2010	2011	2012
3d.1.1	By June 2012, 70% of LAUSD teachers will use technology tools to deliver instruction at least two days a week, as measured by the EdTechProfile, Technology Assessment Profile, Personal Use Section, Question 23.	50%	60%	70%
3d.1.2	By June 2012, students of at least 50% of LAUSD teachers will receive standards-based classroom assignments requiring them to use computers and peripherals on average weekly as measured by the EdTechProfile, Technology Assessment Profile, Student Use Section, Question 2.	30%	40%	50%

GOAL 3d.2: LAUSD students, teachers, and other staff will increase their use of technology to enhance and enrich teaching and learning.

Curriculum Links: LEA Plan Performance Goals 1, 2 and 5; Superintendent's Guiding Principles SGP 2, 3; Superintendent's Strategic Plan SS1, 2, 3, 6 and 7; Senior Deputy Superintendent's Action Plan SDSAP 1 and 2.

	OBJECTIVES & BENCHMARKS:	2010	2011	2012
3d.2.1	In each year, the percentage of teachers using technology tools to create instructional materials or lessons at least two days a week will increase over the previous year as measured by the EdTechProfile, Technology Assessment Profile, Personal Use Section, Question 22.	Up 5 points over 2009	Up 5 points over 2010	Up 5 points over 2011
3d.2.2	By June 2012, 50% of teachers will assign work to students involving technology on average weekly to support academic achievement as measured by the weighted average aggregation of the EdTechProfile, Technology Assessment Profile, Student Use Section, Question 3 for all categories (word processing, reinforcement and practice, research, creating reports, demonstrations, correspondence, solving problems and graphically presenting information.)	40%	45%	50%

	Action Plan (for all 3d goals)	Timeline
a	At all levels, LAUSD will coordinate technology use to support and align with the LEA Plan, the Superintendent's Guiding Principles and Strategic Plan, Action Plan and other District and state-required plans (e.g. 2008 revised Plan for Career/Tech Ed). 878 sites: Will incorporate technology resources as applicable into Site Single Plan for Student Achievement. 8 local districts: Will provide PD coaches, facilitators, and technology implementation support. District: Chief Officers designated staffs collaborate on policy, resources, practices, local district needs. Technology Steering Committee formed as liaison and to monitor Education Technology Plan.	Ongoing, 2009-12 & sustained. Single Plans revised annually Technology Steering Committee meets quarterly
b	LAUSD will provide ongoing, sustained support of state-adopted textbooks/supplements, including technology components contained therein, such as DVDs and websites. Sites: Teachers and students will engage in a coherent, systematic implementation of the new, technology-rich, core text programs. Local districts: Will provide PD coaches, facilitators, and technology implementation support. District: Educational Technology Group experts will provide PD design resources and collaborate, as requested, during adoption process. ITD-Capital Projects will ensure sufficient networking bandwidth and computer access.	New adoption implementation schedule: 2008-09: Mathematics 9-12 2009-10: Mathematics K-8 2010-11: Reading Language Arts/ELD K-8 2011-12: Reading Language Arts/ELD, 9-12 2012-13: History/Social Science K-12

	Action Plan (for all 3d goals)	Timeline
c	LAUSD and/or individual schools will provide web-based subscriptions to CBE/CLRN-approved programs based on site plans/budgets such as Carnegie, Compass, Kaplan, Explore Learning's Gizmos (Mathematics; Science), Vantage Learning's MY Access (Writing), Scholastic READ 180 (Reading/Language Arts) or others as applicable, aligned to the District's Instructional Guides, many of which will include model lesson plans and immersion units. Sites: Teachers and students will use online curriculum-oriented software/programs for individualized and/or group instruction/learning to support student attainment of content standards. Local districts: Will provide PD coaches, facilitators, and technology implementation support. District: Educational Technology Group/Offices of Instruction will collaborate on policy, centralized roll-out aligned with District and local district needs/resources; and will negotiate discounts and vendor PD, as applicable; ITD-Capital Projects will ensure sufficient networking bandwidth and computer access.	Middle Schoo/K-8 Focus 2008-10 High School/DACE Focus 2010-12 Elementary School/EEC Focus 2011-13
d	24/7 online learning services such as Apex Learning and the Community College Collaborative as well as LAUSD internally procured/developed online learning program content will be increasingly available to meet specific learning needs of individual middle and high school students in areas such as credit recovery; CAHSEE preparation, meeting A-G requirements, Advanced Placement courses, GATE, and English learner needs in order to increase the District's graduation rate and support/complement traditional classroom efforts to improve academic achievement. Sites: Teachers and students will use online curriculum-oriented software/programs for individualized and/or group instruction/learning to support student attainment of content standards. Local districts: Will provide PD coaches, facilitators, and technology implementation support. District: Educational Technology Group/Offices of Instruction will collaborate on policy, centralized roll-out aligned with District and local district needs/resources; and will negotiate discounts and vendor PD, as applicable; ITD-Capital Projects will ensure sufficient networking bandwidth and computer access.	Gr 8-12 for identified students beginning 7/1/09 and increases/results measured annually thereafter.

	Action Plan (for all 3d goals)	Timeline
e	LAUSD teachers will access and use online standards-based model lesson plans involving technology integration (e.g., District resources, CTAP 11, CLRN, webquests, etc.) in alignment with District's subject-area *Instructional Guides* to support student attainment of state content standards Sites: Teachers and students will use appropriate lesson plans for individualized and/or group instruction/learning to support student attainment of content standards. Local districts: Will provide PD coaches, facilitators, and technology implementation support. District: Educational Technology Group/Offices of Instruction will collaborate on policy, centralized roll-out aligned with District and local district needs/resources including Moodle shell development; support for cross-local district alignment activities with *Instructional Guides* as applicable; identifying best practices; ITD-Capital Projects will ensure sufficient networking bandwidth and computer access.	Middle School Focus 2008-10 High School/DACE Focus 2010-12 Elementary School/EEC Focus 2011-13
f	Standards-based, student projects (individual and/or cross curricular) will be increasingly supported by a flexible learning environment leveraging laptops and other mobile learning devices. Sites: Will allocate resources and coordinate laptop/mobile tools rotation schedule and support available to meet project needs. Local districts: Will provide PD coaches, facilitators, and technology implementation support. District: Educational Technology Group/Offices of Instruction will collaborate on policy, centralized roll-out aligned with District and local district needs/resources and identify best practices; ITD-Capital Projects will ensure sufficient networking bandwidth and computer access.	Mobile/laptop inventory, best practices, rotation/collaboration schedules, support are identified, addressed, monitored annually Gr 6-8 by 6/30/10 Gr 9-12 by 6/30/11 Gr 3-5 by 6/30/12

	Action Plan (for all 3d goals)	Timeline
g	Students in grades 3-12 who do not already have such access will be provided with a District lausd.net account. Sites: Students will use their lausd.net accounts from school or from home/community centers to access email, classroom website postings, and District-provided 24/7 online subscription resources to reference databases and social studies materials such as Britannica, Grolier and World Book reference databases and ABC- CLIO for assignment research; communication with other students, teachers, and experts and Internet/website access. Local districts: Will identify and collaborate with local community resources to arrange access for students without internet at home. District: Will coordinate account assignment with student information system and providers.	Gr 6-8 by 6/30/10 Gr 9-12 by 6/30/11 Gr 3-5 by 6/30/12
h	LAUSD teachers and students will increasingly use streaming media services/resources such as California Streaming, Discovery Education streaming and The Futures Channel, among others for instruction, demonstrations, presentations, and projects as these resources more closely align to textbooks and standards and can be utilized with end user devices. Sites: Teachers and students will use streaming media services for individualized and/or group instruction/learning to support student attainment of content standards. Local districts: Will provide PD coaches, facilitators, and technology implementation support. District: Educational Technology Group/Offices of Instruction will collaborate on policy, centralized roll-out aligned with District and local district needs/resources; and will negotiate discounts and vendor PD, as applicable; ITD-Capital Projects will ensure sufficient networking bandwidth and computer access	LEA Plan identified sub group a primary focus all years, 2009-12, including EL, students with disabilities and students identified at risk of dropping out

	Action Plan (for all 3d goals)	Timeline
i	Teachers and students will increasingly utilize video conferencing to connect classrooms with outside experiential learning opportunities such as NASA Explorer; MOCA; ACME Animation Project; and PORTS "The Parks Online (CALREN-K12HSN project for middle and high school students") and others. Sites: Teachers and students will use video conferencing for individualized and/or group instruction/learning to support student attainment of content standards. Local districts: Will provide PD coaches, facilitators, and technology implementation support. District: Educational Technology Group/Offices of Instruction will collaborate on policy, centralized roll-out aligned with District and local district needs/resources; and will negotiate discounts and vendor PD, as applicable; ITD-Capital Projects will ensure sufficient networking bandwidth and computer access	As applicable, Design Schools (formerly Innovation Division), EETT Competitive schools and other schools who are interested and have the infrastructure and resources to support participate and then all disseminate best practices at InfoTech annually
j	Teachers and students assess "i-Tunes LAUSD" potential to expand student learning opportunities and deliver 24/7 access to outward-facing educational content from hundreds of top colleges, universities, and educationally focused organizations across the country, as well as inward-facing LAUSD created content. Sites: Will select students and teachers to participate in pilot and monitor results annually. Local districts: Will provide PD coaches, facilitators, and technology implementation support District: Will arrange servers, develop model in cooperation with Apple and seed iTunes LAUSD content, using existing podcasts such as those developed for middle school science/mathematics content in EETT-Competitive grants, Language Arts content in READ 180, etc.	As applicable, Design Schools (formerly Innovation Division), EETT Competitive schools and other schools who are interested and have the infrastructure and resources to support participate and then all disseminate best practices at InfoTech annually

	Action Plan (for all 3d goals)	Timeline
k	LAUSD students will increasingly participate in national, state, and local symposia, conferences, programs, and competitions in order to develop and demonstrate their attainment of academic content proficiency in science, mathematics and language arts as well as information/technology knowledge and skills. Examples include local, state and national Academic Decathlon and Robotics Competitions; county initiatives such as Digital Voice, Future Cities; District programs such as the annual InfoTech Conference among others. Sites: Will ensure teachers and students have the opportunity to participate. Local districts: Will provide program information. District: Will coordinate participation with national, state, county, and local planning efforts.	All grades, as appropriate; assessed annually, with increases in participation monitored and results noted.
l	Additional interactive technologies including electronic whiteboards, student response devices and other instructional and assessment classroom technology devices piloted in EETT Competitive Grant implementation projects and other District initiatives are increasingly utilized, particularly in LEA Plan focus area language arts and mathematics classrooms, to increase student engagement, assess student knowledge and provide immediate feedback. Sites: Will coordinate/post electronic whiteboard and student response device rotation site schedule and support availability as appropriate; provide opportunities for best practice dissemination among staff. Local districts: Will provide opportunities for best practice dissemination across sites. District: Will create opportunities for best practice dissemination across local districts.	All grades, as appropriate; assessed annually, with increases in inventories monitored and results noted

	Action Plan (for all 3d goals)	Timeline
m	Grade 6, 7 and 8 grade mathematics and science teachers will share MSTP and IMaST best practices developed within multiple EETT Competitive Grant implementation projects 2003-2008 among 29 awarded middle schools via DVD, 3-5 minute podcasts, town hall meetings (virtual math/science meetings held via video conferencing) and/or at Summer Institute Programs. Sites: Will identify participants and promising practices. Local districts: Will collaborate on meeting/institute topics and cross-district cohorts/participation. District: Will facilitate video conferencing resources and/or Summer Institute scheduling/teacher stipends, as applicable.	2010: 3 local districts 2011: 5 local districts 2012: 8 local districts
n	Through the Los Angeles County and City Public Libraries, students will be able to access online live homework help. Sites: Will ensure students, parents, teachers are aware of resource. Local district: Will identify and collaborate with local community resources to arrange access for students without internet at home.	24/7 all year, ongoing, 2009-12
o	The District, via Educational Technology Group, will make resources for planning and/or presentation resulting from the above action plan strategies available on the District website and provide links to this information for local district offices and site websites, as applicable.	2010-2012

Person Responsible	Monitoring, Evaluation, and Program Modification Process
Students	• Improve academically annually, and graduate from high school. • Increase technology competencies and use technology resources to improve learning, on an ongoing basis. • Take Grade 5, 8 and 11 EdTechProfile Student Survey annually, as part of monitoring/assessment for these goals, as applicable; and complete student projects as applicable annually.

Person Responsible	Monitoring, Evaluation, and Program Modification Process
Teachers	• Take/update the EdTechProfile Technology Assessment Profile annually between August and October (used to determine type and frequency of teacher and student use of technology, including online lesson plans), • Assess student technology-based work processes and products; teach/re-teach as needed on an ongoing basis; modify lessons for next year (e.g., choose to use a different technology to address a certain standard) on an annual basis. • Determine student need for intervention and make relevant technology-based assignments on an ongoing basis. • Examine/analyze CST results and plan instruction, including the use of technology, as needed, on an annual basis.
Site administrators	• Include 3d goals, objectives and benchmarks in Site Single Planning and standard monitoring of results on an ongoing basis. • Ensure all teachers and administrators fill out/update Technology Assessment Profile annually and look at resulting reports and make professional development/other decisions based on results annually. • Monitor classroom instruction, including implementation of adopted text series technology components, project-based learning, and use of curriculum software (e.g., classroom walkthroughs, formal or informal observations, review of lesson plans) on an ongoing basis. • Ensure lab and equipment sharing schedules are equitable, aligned with program needs on an ongoing basis.
Local district office staff, as appropriate	• Include 3d goals, objectives and benchmarks in standard meetings and discussions with sites on an ongoing basis. • Provide PD for Technology Assessment Profile tool annually; assess site results for future PD planning on an ongoing basis. • Track which schools use which electronic learning resources and best practices for same on an ongoing basis.
Director, Media Services	• Review statistics on use of District-provided databases—make decisions on whether to keep providing databases annually. • Monitor streaming media availability and use; evaluate each service and decide to acquire/renew/update hardware or network or procedures (direct streaming or storing/recording on server, etc.) on an ongoing basis.

Person Responsible	Monitoring, Evaluation, and Program Modification Process
District Staff Chief Technology Director/Educational Technology Group	• Assess local district 3d Technology Assessment Profile results and provide District wide trending annually. Provide the following on an annual basis: • PD for local district office staff as applicable • Assessment of technology components of adoptions—during adopting process, during implementation, what to look for in subsequent adoptions • Monitoring of online learning for students program • Tracking of student participation in conferences & symposia—numbers, success, how to improve • Statistics on students having, using lausd.net accounts • Monitoring of videoconferencing for student learning
District Staff, Chief Technology Director/Capital Projects	• Assessment of adequate network bandwidth, technology support for adoption-related technology components annually and/or at point of upgrade projects and/or via online survey on an ongoing basis.
Local district and District Instruction offices	• Include 3d goals, objectives and benchmarks in standard monitoring of classroom/site/local district results and continuous improvement planning on an ongoing basis. • Identify promising professional practices where technology integration is transforming teaching and learning and communicate, disseminate results and resources on an ongoing basis.

3e. Students' acquisition of technology skills and information literacy skills needed to succeed in the classroom and the workplace.

In order to succeed in school, life, and work in the 21st century, students need to master a wide range of technology skills, including those relating to creativity and innovation; communication and collaboration; research and information fluency; critical thinking, problem-solving, and decision-making; digital citizenship; and technology operations and concepts (International Society for Technology in Education [ISTE] National Educational Technology Standards for Students (NETS*S, 2007). According to a study conducted for the Partnership for 21st Century Skills, applied skills that employers most value include professionalism/work ethic, oral and written communications, teamwork/ collaboration, and critical thinking/problem-solving—which they often find lacking in entry-level employees. In a 2007 national poll of voters, 88% of those surveyed said they believe that schools can and should incorporate 21st century skills such as critical thinking and problem-solving skills, computer and technology skills, and communication and self-direction skills into their curriculum.

In 2007, the American Association of School Librarians (AASL) issued its new Standards for the 21st Century Learner stating that the definition of information literacy has become more complex as resources and technologies have changed. Information literacy has progressed from the simple definition of using reference resources to find information to one in which multiple literacies, including digital, visual, textual, and technological, have now joined information literacy as crucial skills for this century. Information literacy itself is defined as the ability to define, locate, select, organize, present, and assess information in and through a variety of media technologies and contexts to meet diverse learning needs and purposes. An information literate person knows and follows safety, ethical, and legal procedures in the use of technology.

The California Department of Education (CDE) defines technology literacy as "the ability to use appropriate technology responsibly, to communicate, to solve problems, and to access, create, integrate, evaluate and manage information to improve learning of state content standards in all subject areas and to acquire lifelong knowledge and skills in the 21st century."

Finally, federal No Child Left Behind (NCLB) Title II, Part D goals require "assisting fourth through eighth grade students with crossing the digital divide with the integration of grade level appropriate technology proficiencies that ensure *all students are technologically literate by the time they finish the eighth grade, regardless of the student's race, ethnicity, gender, family income, geographic location, or disability." (italics added for emphasis)*

LAUSD has embraced the above four national and state descriptions, frameworks and standards in developing a reasonable approach to address its students' acquisition of technology skills and the information literacy skills needed to succeed in the classroom and the workplace. The District's Educational Technology Group will utilize the online Student Survey component of the state's EdTechProfile set of tools (and the tool currently utilized by all LAUSD teachers annually, the Technology Assessment Profile self assessment) as a means of measuring the attainment of these proficiencies among students, along with teacher-developed student project rubrics at the 5th, 8th and 11th grade levels by 2012, per the Action Plan included in this Section.

Each of the applicable Student Technology Skills (Table 5) contained in the EdTechProfile Student Survey was aligned by the District's Educational Technology Group in 2007-2008 to an appropriate grade level at which proficiency is being tracked and is included as an Appendix to this Plan.

The following table indicates current technology-related proficiencies of LAUSD students. Over 50% of the approximately 66,000 students responding to the Student Survey in June 2008 are fairly confident using email, online discussions, search engines, drawing/paint software, word processing and video/digital cameras. However, far fewer express an intermediate or advanced level of competency in other key technology literacy areas such as using spreadsheets, databases, multimedia software to create products, graphic organizers to solve problems or operators to narrow web searches, as demonstrated by the following 8th grade sampling of data:

Table 5: Student Technology Skills
EdTechProfile Student Survey, June 2008
Data is included for 66,000 students, about 10% of the District total

Technology Skills	Don't know how	Can do but need help	Can do by themselves	Can teach others to do
How far along are students in learning how to use...				
1. Basic tools				
Word processor to write/print documents	18%	30%	33%	19%
Spreadsheet to enter/calculate numbers	34%	33%	26%	8%
Spreadsheet to create graphs	34%	32%	26%	8%
Database to enter information	37%	32%	24%	7%
Database to search, sort info & create reports	29%	30%	30%	11%
2. Multimedia tools				
Draw or paint software to create pictures	9%	18%	44%	28%
Video camera to make videos	21%	26%	35%	19%
Video editing software to edit videos	41%	32%	19%	8%
Digital cameras, scanners	25%	28%	29%	18%
Image-editing software to enhance pictures	36%	30%	24%	11%
Presentation software	29%	27%	27%	17%
Multimedia software to create products	51%	27%	15%	6%
3. Communication tools				
Email to send and receive messages	16%	17%	36%	31%
Online discussions to gather information	20%	23%	36%	20%
Web authoring software to make web pages	46%	26%	18%	10%
4. Research and problem-solving tools				
CD-ROMs to gather information	29%	30%	28%	13%
Online reference software to gather information	35%	28%	27%	10%
Search engines to find info on the Web	22%	24%	33%	22%
Narrow Web searches using Boolean operators	45%	26%	21%	8%
Graphing calculators to solve math problems	26%	29%	32%	13%

Table 5: Student Technology Skills EdTechProfile Student Survey, June 2008 Data is included for 66,000 students, about 10% of the District total				
Technology Skills	Don't know how	Can do but need help	Can do by themselves	Can teach others to do
Probes and probe software to collect info	53%	28%	14%	4%
Graphic organizers, system thinking software to solve problems	42%	32%	20%	6%

Based on the standards and needs demonstrated in 3d, the District has determined the areas of focus during the term of this plan as stated in the objectives/benchmarks below, and will assess attainment utilizing the EdTechProfile Student Survey on an annual basis in 5th, 8th and 11th grade (approximately 150,000 students), as well as projects described in the Action Plan.

GOAL 3e.1: LAUSD students will develop critical technology and information literacy skills that enable them to become independent learners and further their education.

Curriculum Links: LEA Plan Performance Goals 1, 2, 3; Superintendent's Guiding Principles SGP 1, 2, 3; and Superintendent's Strategic Plan SS1, 2, 3 6 and 7

	OBJECTIVES & BENCHMARKS:	2010	2011	2012
3e1.1	By June 2012, 50% of grade 8 students will demonstrate proficiency with technology and information literacy skills as determined by identified responses in the Student Survey in EdTechProfile related to video camera, online reference software/databases, spreadsheet, probes and graphic organizers as well as those proficiencies listed for 5th grade students in 3e1.2	35%	40%	50%
3e1.2	By June 2012, 50% of grade 5 students will demonstrate proficiency with technology and information literacy skills as determined by identified responses in the Student Survey in EdTechProfile related to word processing, drawing, use of digital camera and presentations, CD ROMs.	40%	45%	50%
3e1.3	By June 2012, 50% of grade 11 students will demonstrate proficiency with technology and information literacy skills as determined by identified responses in the Student Survey in EdTechProfile including those skills listed in 3e1.1, 3e1.2 as well as the following: spreadsheet entry/graphing, database entry/search/report, narrowing WWW searches, graphic calculators and interacting with the outside world.	35%	40%	50%

GOAL 3e.2: LAUSD students will acquire technology and information literacy skills through the use of technology in lessons and activities embedded in the curriculum.

Curriculum Links: LEA Plan Performance Goals 1, 2 and 5; Superintendent's Guiding Principles SGP 2, 3; Superintendent's Strategic Plan SS1, 2, 3, 6 and 7; Senior Deputy Superintendent's Action Plan SDSAP 1 and 2.

	OBJECTIVES & BENCHMARKS:	2010	2011	2012
3e.2.1	By June 2012, 25% of teachers will rate themselves and their students as proficient in information literacy skills as shown on the EdTechProfile Technology Assessment Profile, Standard 16d.	12%	18%	25%
3e.2.2	By June 2012, 25% of teachers will rate themselves and their students as proficient in creating and utilizing technology-enhanced learning opportunities for using information to solve problems and draw conclusions, as shown on the EdTechProfile Technology Assessment Profile, Standard 16e, Question 1.	11%	18%	25%

	Action Plan (for all 3e goals)	Timeline
a	Skills for each grade span identified by the District within the EdTechProfile Student Survey will be correlated with *Instructional Guides*. Sites: Participating EETT grant sites will provide mathematics/science correlations of the standards and matrix with the core curriculum in the *Instructional Guides* as examples of incorporating technology/information literacy skills while teaching the core curriculum. Local districts: Will collaborate/determine focus areas for correlation. District: Will provide ITAF/Specialist and Instruction Office leadership support as needed to correlation project.	29 MS by June 2009, all grade 8 by June 2010, all Grade 5 and 11 by June 2011

	Action Plan (for all 3e goals)	Timeline
b	Rubrics for student technology-based curricular projects (suitable for each core subject) through which students at three grade levels (5th, 8th, and 11th grades) will demonstrate their technology/ information literacy skills proficiency will be developed and teachers will assign by the end of the following year. Sites: Participating EETT grant sites will provide mathematics/science culminating project rubrics as examples. Local districts: Organize teachers to develop the grade 3, 5 and 8 rubrics and get them adopted. District: Will provide ITAF/Specialist and Instruction Office leadership support as needed to rubric project, which will be managed by the Educational Technology Group with the support of local districts and the Division of Instruction.	29 MS by June 2009, all grade 8 by June 2010, all Grade 5 and 11 by June 2011
c	Teacher Librarians will assist in the development and teaching of relevant technology and information literacy skills aligned to current grade/content project requirement schedules and Instructional Guide content standards. Sites: Will identify teacher librarian content specialty areas and interest Local districts: Will identify local district focus areas of greatest instructional need and arrange for multi site teacher librarian work sessions. District: Will provide Educational Technology Group, Instruction and Media Services expertise to assist in roll out of this project.	Throughout 2009-12
d	Elementary school students will be taught technology and information literacy skills by their classroom teachers during the course of academic instruction in California content standards (such as elements of Writing Strategies—Research and Technology and Writing and Speaking Applications in English/Language Arts; Historical and Social Sciences Analysis Skills in History/Social Science; Mathematical Reasoning; and Investigation and Experimentation in Science), using classroom or lab computers to practice.	Per *Instructional Guides*
e	Middle school students will be taught technology and information literacy skills by their classroom teachers, in collaboration with Teacher Librarians during the course of academic instruction in California content standards, using fixed or mobile labs to practice. Some middle school students will be able to take electives or special programs involving technology.	Per *Instructional Guides*

	Action Plan (for all 3e goals)	Timeline
f	High school students will be taught and will demonstrate technology and information literacy skills through chosen electives (such as business, computer science, art, media, career technology, and ROP courses) and through their English and other core classes (through collaboration between their teachers and librarians	Ongoing, 2009-12
g	Students (PreK-Adult) will be taught basic computer knowledge and skills and application-specific procedures required to access and use each piece of required software (such as technology components of adopted text series such as Digital Path, READ 180, etc, online learning programs, streaming video, etc.). They will be taught how to use the program feedback, as applicable, to track and improve their achievement.	Teachers, Tech Coordinators and ITAF collaboration whenever a new piece of software is introduced.
h	Students will be taught to use productivity software (such as Microsoft Office) to complete assignments, including word processors for documents, spreadsheets for accounting and graphing, presentation software and specialized tools such as Inspiration for graphic organizing, etc.	Scheduled as per *Instructional Guide* correlation or as needed for assignments.
i	Students will be taught about, and will have the opportunity to use, peripherals needed for use with productivity software (as needed for assignments and as appropriate by grade level), such as printers, projectors, interactive white boards, student response devices, digital still and video cameras, etc.	Scheduled as per *Instructional Guide* correlation or as needed for assignments.
j	Students will be taught how to locate, access and evaluate information and resources (including online reference databases) on the Internet. Search strategies will be taught as appropriate per grade level.	Scheduled as per *Instructional Guide* correlation or as needed for assignments; teacher librarian collaboration.
k	LAUSD students will increasingly participate in national, state, and local symposia, conferences, programs, and competitions in order to develop and demonstrate their attainment of academic content and information/technology knowledge and skills. Examples include local, state and national Robotics competitions; county initiatives such as Digital Voice, Future Cities; District programs such as InfoTech.	All grades, as appropriate; assessed annually, with increases in inventories correlated with results.
l	The District, via the Educational Technology Group, will make resources for planning and/or presentation resulting from the above action plan strategies available on the Educational Technology Group District website and provide links to this information for local district offices and District divisions websites, as applicable.	2010-2012

Person Responsible	Monitoring, Evaluation, and Program Modification Process
Students	• Take Grade 5, 8 and 11 EdTechProfile Student Survey (used to monitor and determine student technology/information literacy proficiency) • Produce a technology-based, curriculum-related project in grades 5, 8, and 11.
Teachers	• Take/update the EdTechProfile Technology Assessment Profile annually between August and October (used to monitor and determine information literacy instruction and proficiency, creation of learning opportunities to use information to problem solve, draw conclusions. • Assess student technology-based processes and products; use rubrics to assess grade 5, 8, and 11 projects used to demonstrate technology and information literacy skills; teach/re-teach these skills as needed; modify lessons for next year. • Provide best practices input for development of rubrics and skills correlations with *Instructional Guides.*
Teacher Librarians	• Maintain records of collaboration activities with classroom teachers and class use of library media centers for learning and implementing technology and information literacy skills.
Site administrators	• Ensure all teachers and administrators annually fill out/update Technology Assessment Profile; review resulting reports, make PD decisions accordingly. • Include 3e goals, objectives and benchmarks in Site Single Planning and standard monitoring of results. • Monitor classroom instruction, including teaching of technology and information literacy skills in lessons (e.g., classroom walkthroughs, formal or informal observations, review of lesson plans).
Local district office staff, as appropriate	• Include 33 goals, objectives and benchmarks in standard meetings and discussions with sites • Provide PD for Technology Assessment Profile tool; assess site results for future PD planning • Tracking of which schools use the rubric-based projects for students to demonstrate skills.
Director, Media Services	• Assess teacher librarian roles, results in *Instructional Guide* correlations and assistance with teaching information literacy skills.

Person Responsible	Monitoring, Evaluation, and Program Modification Process
District Staff Chief Technology Director/Educational Technology Group	• Assess local district 3d Technology Assessment Profile results and provide District-Wide trending. • Provide PD for local district office staff as applicable. • Tracking of student participation in conferences & symposia—numbers, success, how to improve,

3f. How the District will address the appropriate and ethical use of information technology in the classroom, including issues of copyright, fair use, downloading, file sharing, and plagiarism. AND

3g. How the District will address Internet safety, including online privacy and avoidance of online predators.

The Los Angeles Unified School District requires an annual Administrator Certification Form (due in October and in April) which certifies that the required actions and activities have been completed in accordance with District nondiscrimination and safety mandates, policies and procedures. Included among these certifications, as per MEM-4207.0 from the Office of the General Counsel dated May 28, 2008, are site level assurances from each administrator, employee, student and parent (as appropriate) of each compliance, which include cyberbulling and other Internet related policies related to applicable areas of the following:

- Antibullying: reference BUL-1038
- Childe Abuse Reporting: reference BUL-1347
- Hate-Motivated Incidents/Hate Crimes: reference BUL-2047
- Nondiscrimination/Harassment: reference Memorandums, Student Brochures, Parent/Student Handbook; BUL-4045.0; 1893.1; 3349.0; 2521.1
- Parent Student Handbook Distribution (including AUP Policy)
- Safe School: Plans Volume 1 and 2
- Section 504 and Students with Disabilities: reference BUL-4045.0 and brochure
- Sexual Harassment: reference BUL-1893.1 and 3349.0
- Student and Employee Security: reference BUL—2368.1
- Title IX: reference BUL-2521.1
- Uniform Complaint Procedures: reference Memorandum, issued annually

The following are additional policies specific to use of technology and information in LAUSD:

The Acceptable Use Policy for District Computer Systems, Bulletin 999.3, issued 06/13/07; 6-pages, including attachments: Information for Students and Parents (2-pages) requires signature of student and parent/guardian prior to use.

LAUSD Web Site Development and Management Policy, Bulletin 2424, issued 03/02/06; 11-pages, including attachments: Web Site Publication Authorization; LAUSD/Inside LAUSD Publication Procedures: LAUSD/Inside LAUSD Glossary of Common Terms.

Information Protection Policy, Bulletin 1077.1, issued 12/05/06, 35-pages, including attachments: HIPAA; FERPA.

Compliance with the 1976 United States Copyright Laws, Bulletin 714, issued 01/08/04; 17-pages, including attachments: Sample Copyright Scenarios; Warning Concerning Copyright Restrictions; Order for Photocopy or Reproduction of Instructional Materials; Record of Off-Air Recording; Sample Publisher/Producer Permission Request Form.

On an ongoing basis and in compliance with state and national legislation enacted and anticipated, LAUSD, in collaboration with i-Safe Inc (http://isafe.org), is working to safeguard children's online experiences. LAUSD uses Internet safety resources and training developed by iSafe, a government grant-funded provider of Internet safety education for school communities. This non-profit organization was founded in 1998 and is endorsed by the U.S. Congress. i-SAFE is dedicated to protecting the online experiences of youth everywhere. i-SAFE incorporates classroom curriculum with dynamic community outreach to empower students, teachers, parents, law enforcement, and concerned adults to make the Internet a safer place.

LAUSD provides 24/7 online professional development opportunities for its teachers on Internet safety and other related topics. Courses are also taught at school sites using certified iSafe trainers for staff, parents and the community. In addition, all teachers participating in Educational Technology professional development courses receive components on Internet safety for students as part of the course. This includes issues such as personal safety, cyber community issues, predator identification, cyber security, intellectual property and methods of effective outreach.

GOAL 3f.1: LAUSD students and all District employees will demonstrate appropriate and ethical use of information technology.

GOAL 3g.1*:* The District will ensure a safe environment for on-line activities.

Curriculum Links: LEA Plan Performance Goal 4; Superintendent's Guiding Principles SGP 2, 5; Superintendent's Strategic Plan 5; Senior Deputy Superintendent's Action Plan SDSAP 5;

	Action Plan (for both goals)	Timeline
a	The District will review its formal policy on copyright, fair use, and teacher-owned software. Will revise as necessary and disseminate to teachers.	*Revise by August 2009* & give to teachers; daily/ weekly monitoring through walkthroughs; reviewed in spring of each year.

	Action Plan (for both goals)	Timeline
b	The District will continue its standard process for monitoring AUP compliance and disseminating permissions information to all staff and students.	Annual check.
c	LAUSD will require signed AUP and other required documents from all teachers upon hire, and include 3f/g information during new hire orientation. Supervised by local districts with District support in the new hire process.	Ongoing, 2009-12 upon hire; October and annually thereafter.
d	LAUSD will require signed AUP from all students/parents upon enrollment and then every year. Tracked at the site level.	Ongoing, 2009-12, October and annually thereafter.
e	Issues of legal and ethical use of technology and Internet safety will be addressed for all age groups in the Information/Technology literacy skills embedded in the Instructional Guides Teachers/Teacher Librarians will utilize national and state developed materials such as iSafe, potentially the CTAP Region 4 CyberSafety model series, including Cyber Predators, Piracy & Plagiarism, Social networks, Inappropriate Content, Internet Safety and Cyber Bullying, and/or others as appropriate to instruct students.	Skills embedded by 2009-10 for Grades 6-12; by 2010-11: Grades K-5. Instruction ongoing, 2009-12, according to state content standards/Instructional Guides.
f	LAUSD/Local districts will provide iSafe, other relevant Internet Safety and ethics professional development to teachers.	Annually, all schools; roll out TBD
g	LAUSD will provide iSafe, other relevant Internet Safety and ethics training to students.	See Item e
h	LAUSD will provide iSafe, other relevant Internet Safety and ethics (e.g., responsible use) training to parents via Parent Centers and other mechanisms, as per a collaboration with the local districts; School Family & Community and Parent Services Division and the Educational Technology Group.	Annually, all schools; roll out TBD.

Person Responsible	Monitoring, Evaluation, and Program Modification Process
Students	• Sign AUP, take annual Student Survey in EdTechProfile (Gr 5, 8, 11) and demonstrate knowledge of ethics and safety in work samples.

Person Responsible	Monitoring, Evaluation, and Program Modification Process
Teachers	• Take/update the EdTechProfile Technology Assessment Profile annually between August and October (used to monitor and demonstrate teacher and student proficiency/knowledge/practice with CCTC Standard 9, knowledge of law, safety, and acceptable use policies, questions 1, 3) • Monitor student use of computers and other technology, including compliance with Acceptable Use Policy.
Site administrators	• Monitor compliance with District policy on copyright, fair use, and teacher-owned software via classroom walkthroughs • Sign Administrator Certification Form (October and April) • Monitor classroom instruction, including teaching of relevant ethics, Internet safety and copyright policy in lessons (e.g., classroom walkthroughs, formal or informal observations, review of lesson plans). • Run and review site-level Technology Assessment Profile reports annually
Local district staff	• Monitor and track staff AUP and other required Bulletin signing. • Produce and analyze anonymous aggregation of Technology Assessment Profile results • Will supervise process of making sure the required subjects are in *Instructional Guides*
Chief Technology Director, and Director Educational Technology Group	• Will review District policy on copyright, fair use, and teacher-owned software with Office of the General Counsel as appropriate for update each year as per legislative and District mandates. • Working with site principals, will monitor standard process for monitoring AUP compliance • Will review Learning Zone records to ascertain number of teachers and other staff taking i-Safe or similar training. • As needed, will add courses for teachers/staff to learn/practice the CCTC standards 9i (1) and (3)

SECTION 3h: District policies and practices that ensure equitable technology access for all students are included here. .

The Los Angeles USD Board Policy calls for equitable access for all students to all District resources. Policy Bulletins and Reference Guides related to the topic of equitable technology access include:

Closing the Achievement Gap Implementation (Fall Semester Activities), Policy Bulletin #3833.3, issued10/17/07; 49-pages (secondary education)

Information for Schools on Supported Instructional Technology Activities from the Educational Technology Group, Reference Guide #REF3975, issued 11/01/07; 6-pages (all schools)

Least Restrictive Environment Brochure, Reference Guide #REF1388, issued 11/03/04, 28 pages (division of special education)

Further, the LAUSD is compliant with the Americans with Disabilities Act (ADA) to ensure equal and appropriate access to student sub groups. Should students require additional equipment or facilities to enjoy equal access to technology tools, additional assistive technologies will be purchased to meet their needs, as outlined in their IEPs and 504 Plans. Assistive technologies currently used for special education include AlphaSmarts, Go Talk, DynaVox, FM mic/receiver systems for the hearing impaired, books on CD (core literature/ELA materials), and Dragon Speak.

English learners are mainstreamed in elementary schools and pulled out for extra instruction. In secondary schools, Level 1 and 2 (CELDT) English Learners receive additional instruction in specialized ELD classes. English Learners use software such as Rosetta Stone, Side by Side Interactive, Tell Me More, SuccessMaker, and A+ instructional programs. GATE students have opportunities to take technology electives and do enrichment work in core classes, such as Internet exploration and projects. In elementary and middle schools, GATE students are clustered in the classrooms of specially trained GATE teachers; these rooms often have additional equipment.

Programs such as Successmaker, ALEKS, and Accelerated Reader and Math provide individualization for all levels of learners, from remediation through enrichment. At elementary and intermediate schools, classes are scheduled to use the computer labs on a rotating basis, while all schools who share laptop carts among multiple classes typically have laptop schedules determined among staff to coincide with project needs and to promote equitable access for all.

During the term of this plan, the District will identify any issues regarding equitable technology access, including checking student to computer ratios by school and rotation schedules among classes, to determine if they address all students and determine what, if any, modifications are needed.

The District will explore the use of flexible scheduling so that school libraries can remain open via extended hours, including participatory projects with the District's Beyond the Bell before/after/Saturday programs and expanding each year; library use is currently reported quarterly. The District's offices of Instruction, Media Services and Educational Technology Group will work with local districts, site principals and library staff to monitor use of libraries outside of normal school hours to ensure maximum access to students. In addition, local districts will collaborate with public libraries and community centers to provide access to online resources for students who do not have such access from their homes.

3i. Technology use for efficient student record keeping and assessment in support of teachers' efforts to meet individual student academic needs.

LAUSD utilizes and encourages the use of technology tools for the purpose of making student record keeping and assessment more efficient and supportive of teachers' efforts to meet individual student academic needs, including the record keeping and feedback features inherent in many of the instructional programs and online services currently in use throughout the District. Among the systems utilized are: ISIS (Integrated Student Information System), CLAS (Centralized Library Automation System), BTS (Business Tools for Schools), DSS (Decision Support System), Welligent (Special Education and Health Services System) and Princeton Review's Periodic Assessment (PA). The ISIS and Periodic Assessment technology, which will be utilized by all teachers, are covered in detail in this section, while all systems are referenced in Section 5.

Since 2005, sixty percent (60%) of the District's 878 schools have completed site-wide migrations to a school-based record keeping and assessment known as the District's ISIS program. ISIS (Integrated Student Information System) is an Early Childhood to Adult Education student/school management system that consolidates a number of existing student information systems and integrates all student information in a shared, centralized and secure Web-based system of student records for all schools and offices. As of June 2008, all secondary schools have implemented ISIS, including electronic attendance records and final grade reporting. Elementary schools are currently in a phased roll out over the next four years.

At the same time, LAUSD has implemented a system of Periodic Assessments (PAs) based on state content standards which are used as formative assessments involving four core elements: identifying the gap between a student's current learning and what future learning is needed, providing staff with timely feedback to modify the next steps in instruction, involving students and parents in using results and developing learning progressions during professional development meetings so teachers can collaboratively know how to use data to guide instruction.

Periodic Assessments are given three or four times a year in English/Language Arts (grades 6-10), Mathematics (K-Algebra I and Geometry), Science (4-8, Biology, Chemistry and Integrated Coordinated Science) and History/Social Science (Grades 7, 8 and 10). Answer sheets are collected and processed centrally; student results are accessible online to teachers and administrators from any Internet-connected computer within 24-48 hours after answer sheets are picked up. Reports available include Item Response Report (used to determine areas of strength or need on specific standards); Student Level Report (formatted for individual parent or student conferences); Performance Band Report (reported by standard; by class, school, local district or District); Detailed Performance Report (aggregated achievement levels, for administrators); Assessment Comparison Report (compares student performance, by standards, on pairs of assessments); and the Aggregate Item Performance Report (shows aggregate student performance on individual items at the class, school, local district and District levels). Grades K-5 elementary English/Language Arts are assessed with Open Court Assessments from the Sacramento County Office of Education and are given up to six times per year, reported on a separate website within Inside LAUSD.

In accordance with Memorandum 4173 dated March 19, 2008, schools are mandated to administer the *PAs* and "Teachers shall be given the opportunity to meet to analyze and discuss the data so that they use it to inform and guide future instruction".

In order to ensure that explicit time is scheduled for teachers to collaboratively analyze *PA* data, the attached "Phases of Formative/Diagnostic *PA* Process" graphically outlines the continuous improvement cycle which is to be followed during faculty/grade level or common planning time meetings as specified in "Guidelines for Periodic Assessment Data Analysis Using Professional Development Banked Time Days" (Memorandum 4301, dated June 10, 2008). At a minimum, designated dates for analyzing data are scheduled to occur ten (10) days following the end of each assessment window.

GOAL 3i.1: LAUSD will effectively utilize technology for managing student information.

Curriculum Links: LEA Plan Performance Goal 3; Superintendent's Guiding Principles SGP 1, 2 and 3; Superintendent's Strategic Plan 1, 2, 3, 4 and 6; Senior Deputy Superintendent's Action Plan SDSAP 1.

	OBJECTIVES & BENCHMARKS	2010	2011	2012
3i.1.1	By June 2012, all teachers will use the District's ISIS program for attendance and grade posting.	100% secondary, 60% elementary	100% secondary, 75% elementary	100% teachers in all schools

GOAL 3i.2: LAUSD Teachers, coaches and administrators will use District technology for instructional decision-making based on classroom assessment data.

Curriculum Links: LEA Plan Performance Goal 3; Superintendent's Guiding Principles SGP 1, 2 and 3; Superintendent's Strategic Plan 1, 2, 3, 4 and 6; Senior Deputy Superintendent's Action Plan SDSAP 1.

	OBJECTIVES & BENCHMARKS:	2010	2011	2012
3i.2.1	By June 2012, 23,975 LAUSD administrators, coaches and teachers will regularly access formative Periodic Assessment classroom data, using Periodic Assessment online access reports, to guide data-driven decision-making for improving student achievement.	17,650 70% of 25,237 applicable staff	20,190 80% of 25,237 applicable staff	23,975 95% of 25, 237 applicable staff

	Action Plan (for both goals)	Timeline
a	The District will provide ongoing technical training and rollout strategies to ensure all teachers and administrators use ISIS for standardized, integrated student management; local districts and sites will provide support for the ISIS implementation process at all levels.	Secondary—completed Elementary 2009-12
b	The District will provide ongoing *Periodic Assessment* item development and evaluation per cycles established and in alignment with LEA Planning and Curriculum Framework Development Schedule. Those responsible for development and ongoing item evaluation include: the Mathematics and History/Social Science Content Directors and Item Development Teacher Panels, who give direction to the periodic assessment contractor writing *Framework* aligned items, as well as the Periodic Assessment Unit which establishes item and assessment validity and reliability through regular Technical Reports.	2008-2009: Geometry and History/Social Science Grades 7 and 10 2009-2010: History/Social Science Grades 6 and 11
c	Professional development on *Periodic Assessments* is provided through local districts and is supplemented through the online "*Professional Development Guides*" on the LAUSD *Periodic* Assessment website, as well as the salary-point in-service classes which are offered District-wide titled "Building Quality Learning Using *Periodic Assessments* as Instructional Tools". District Office of Instruction and the Standards-Based Periodic Assessment Unit provides PD to Local Districts. At the local district level, PD practices are provided to coaches, facilitators, teachers and administrators in order to continuously support implementation.	Continuous
d	LAUSD teachers, individually and collaboratively, will review *Periodic Assessment* online reports after each administration in order to identify learning gaps and plan instruction.	At least 3-4 times per year per relevant subject, as scheduled
e	LAUSD teachers use individual Periodic Assessment data in conferences with students or parents in order to involve them in strengthening learning practices.	Formal parent conferences are scheduled twice per year. Informal parent conferences are scheduled as needed.
f	At Grades K-5, teachers use School Online Assessment Reports (SOAR) to monitor reading progress. These assessments are administered and reported separately from *Periodic Assessments.*	Up to six (6) times per year.

Action Plan (for both goals)		Timeline
g	To ensure that at least 95% of all students will be provided access to the Periodic Assessments, LAUSD administrators use *Periodic Assessment* reports to monitor implementation and guide professional development at the school, local district and District levels.	At least 3-4 times per year per relevant subject, as scheduled

Person Responsible	Monitoring, Evaluation, and Program Modification Process
Students	• Take classroom *Periodic Assessments* as scheduled in Memorandums 4266 through 4271, dated May 21, 2008 • Use results from assessments and develop future learning plans as specified in "*Periodic Assessment* Brochure: What Students and Their Families Need to Know" (MEM-4092, January 16, 2008)
Teachers	• Use ISIS for attendance and grading • Administer *Periodic Assessments* as scheduled • Review *PA* results individually and in department meetings after each assessment; evidence of teachers' use of data is documented in each school's *"Single Plan for Student Achievement"* and the *"WASC Accreditation School Self-Study"* (used by senior high schools) • Provide feedback through biannual *Periodic Assessment* surveys of program practices. Survey results are communicated through District Memoranda and through the UTLA publication *United Teacher*.
Site administrators	• Ensure implementation of ISIS and "*Phases of Formative/Diagnostic Periodic Assessment Process*" • Use *Periodic Assessment* reports to monitor implementation and guide professional development at the school.
Local district staff	• Use *Periodic Assessment* reports to monitor site implementation and design, deliver PD to coaches, facilitators, teachers and administrators to continuously support implementation.
Standards-Based Periodic Assessment Unit	• Director Standards-Based Education, Coordinator and Specialists hold monthly meetings with District/local district leadership, principals from all levels of schools and LD staff.
Educational Technology Group	• Participate in *PA* Unit meetings to leverage expertise and resources, develop policy, *check and ensure sufficient network bandwidth and test-processing equipment*

Person Responsible	Monitoring, Evaluation, and Program Modification Process
All local district, District: Director Standards-Based Instruction, Periodic Assessment Unit, Local District Administrators of Instruction, elementary and secondary Content Directors for Mathematics and Science, and secondary Content Directors for English/ Language Arts and History/Social Science Director Standards-Based Instruction, Periodic Assessment Unit, and local district and District staff Executive Director, Research and Planning Assistant Superintendent, Professional Learning, Development, and Leadership	• *See Action Plan above, Item a* • Conduct biannual PA user "*Surveys of Periodic Assessment Program Practices*" developed using the *National Staff Development Council Professional Development Standards*. Both quantitative and qualitative "*Surveys*" responses are compiled and improvement practices are collaboratively developed with District/local district staff and UTLA representatives. Survey results are made public through Board Informative, UT newspaper and posted on the Periodic Assessment website within "*Inside LAUSD*" • Bi-monthly participation reports and weekly statistical summary reports on site usage and Helpdesk referrals and resolutions. • Annual reports of comparability between *Periodic Assessments* and the *California Standards Tests* • *Monitoring of SOAR* (contact Carol Fujita at 16444)

3j. Technology use to improve two-way communication between home and school.
On September 11, 2007, the Board of Education approved a contract with the NTI Group, Inc. the provider of the ***Connect-ED*** notification service that will deliver District-Wide the ability to communicate with students, parents, employees and the community.

Connect-ED supports a broad range of communication objectives including local and widespread emergencies, absentee notification, student outreach, and the communication of operational status to affected internal and external groups. The system is able to reach an equally broad range of constituents, including current and prospective students, their parents and guardians, and administrative and instructional staff.

The *Connect-ED* Notification Service provides:

- Ability to reach all or a subset of students/families/employees/community members through a single unified solution
- Multiple communication methods including numerous telephones numbers (home, work, cell, etc.) pagers, facsimile machines and TTY devices for the hearing impaired
- Integration with the Integrated Student Information System (ISIS) to notify families with absent or tardy students
- Potential increase in ADA revenues based on immediate follow-up on student absenteeism
- Equal access to all schools and offices versus only those locations who previously invested in phone dialer solutions
- Potential budget savings by schools who previously invested in phone dialer systems through elimination of hardware supports costs and termination of annual contracts where allowed
- NTI uses an Application Service Provider (ASP) model, eliminating the need for individual schools to purchase or maintain equipment and software
- NTI offers 24 x 7 support and support staff dedicated to LAUSD aligned to the Local Districts to service the schools and offices
- Dual authorization confirmation can be configured to ensure only those authorized to use the system are sending out messages
- Translation into 170 different languages
- Integration with the Business Tools for Schools, Early Education SIS, Elementary SIS, Secondary SIS, Adult SIS, Welligent and CLAS applications
- Ability to prioritize and schedule delivery of messages
- Verification of message receipt through the use of individualized PIN codes
- Ability to compile survey responses
- Training for all end users, trainers and system administrators
- 99.99% availability of the system and fully redundant and distributed back-up and disaster recovery

All District classrooms have phones; all teachers have voicemail. All teachers have web-accessible LAUSD email accounts; email links will be placed on school websites. As desired and monitored by their teachers, students have access to email, discussion groups and blogs.

District and school websites are continually being enhanced. Each District division and office maintains its own content. Teachers and administrators are encouraged to manage individual pages; however, this will be a site decision. Teachers will be able to post homework assignments and other updates as desired; training for and sharing of best practices for online communication and update strategies will be provided via professional development at site, local and District levels.

The District is also investigating opportunities for providing low-income parents in middle schools with access to a free computer and Internet access, the first pilot for which will be in fall 2008 as detailed in the Action Plan.

GOAL 3j.1: LAUSD will use technology to enable and improve two-way communication between school and homes

Curriculum Links: LEA Plan Performance Goal 4; Superintendent's Guiding Principles SGP 4; Superintendent's Strategic Plan 4; Senior Deputy Superintendent's Action Plan SDSAP 4.

	OBJECTIVES & BENCHMARKS:	2010	2011	2012
3j.1.1	LAUSD will maintain high-speed voice and data networks, including up-to-date phone systems, at each school.	100%	100%	100%
3j.1.2	By June 2012, 90% of parents will be able to access student data such as assignments and grades via a parent/student portal on the LAUSD.net website or ISIS.	60%	75%	90%
3j.1.3	By June 2012, 80% of teachers will use technology to communicate with homes (parents and students) once a week to monthly as shown on the EdTechProfile, Technology Assessment Profile.	60%	70%	80%
3j.1.4	All schools will continue to have District-provided Connect-ED services to communicate 24/7 with students, parents, employees and the community.	100%	100%	100%

	Action Plan	Timeline
a	LAUSD school sites will continue to use Connect-ED.	Annual assessment
b	LAUSD teachers will receive instruction on creating and updating simple web pages and maintaining two-way communication via email and other technologies. Instruction will be provided by ITAFs, and local districts, as applicable.	Upon hire and/or system update for all teachers.
c	Video teleconferencing will be utilized for two-way parent/ community Town Hall Meetings such as LA 311 and others. Principals and ITAFs will provide assistance.	As needed
d	Schools will utilize parent-communication guidelines in line with Title 1 requirements for parent participation.	All, ongoing, 2009-12

	Action Plan	Timeline
e	Reports, registration forms and newsletters will be posted on the District website. Parent links and resources on District and site websites will be enhanced. District Communications, site principals and assigned staff, with ITAF/Specialist support.	Reports as issued; newsletters as scheduled by division. Parent link enhancements 2010-11.
f	Parent Facilitated Groups, PTSA and Booster Groups will participate in pilots to create technology-enhanced parent communication/engagement models/options for site consideration. Support will be provided by Site Administrators and ITAFs.	Pilots in 08-09 and 09-10 at all levels, with successful strategies spreading in 09-10 and after (ongoing, 2009-12).
g	District, local districts and sites will provide Parent Centers with mechanisms to improve two-way communications.	Middle: 2010 Elem: 2011 HS: 2012
h	Telecommunications infrastructure will be updated as needed to ensure communication is facilitated.	Evaluate yearly
i	District Educational Technology Group will explore pilots with organizations such as Computers for Youth Foundation and InternetforEveryone to provide options for free computers, training and support and free/reduced cost Internet access for low-income families of 6th grade students.	Pilot 1 MS in 2008-09, determine roll out schedule thereafter.

Person Responsible	Monitoring, Evaluation, and Program Modification Process
Parents	• Fill out annual spring satisfaction survey (developed by Research and Planning and administered throughout local districts)
Teachers	• Take/update the EdTechProfile Technology Assessment Profile annually between August and October (used to monitor and demonstrate teacher use of technology to communicate with homes)
Site Administrators	• Assure/monitor staff knowledge and use of parent-communication guidelines. • Supervising, monitoring, deciding on teacher need for and success with instruction

Person Responsible	Monitoring, Evaluation, and Program Modification Process
Chief Technology Directors, Educational Technology Group and IT Infrastructure	• Supervise use of video teleconferencing for parent/community meetings; assess need for added capacity • Regularly assess communications equipment, procedures and technical support needs of Parent Centers. • Design of pilot program for parent communication models, evaluated yearly, successful models spread to other schools, desire and resources permitting.
Chief Technology Director, Capital Projects	• Conduct annual assessment of adequacy of infrastructure and plan for upgrades as needed.
District Communications office and Chief Information Officers office, other District and local district offices and sites	• Monitoring use of Connect-ED. Annual assessment of use of Connect-ED • Website oversight and design of monitoring processes for updating sites at the District, local district, site and individual teacher level • Assigning/assuring parents and students have accounts to access online information and providing parents with training in how to do this.
Senior Deputy Superintendent's office	• Results of the annual parent satisfaction survey in regard to communications will be provided to the Plan's Steering Committee.

3k. Monitoring of Curriculum Component:

Processes for monitoring, evaluation, and program modification are addressed for each goal within sections 3d-3j. Using the tools and processes described, the responsible person/group will collect data about each activity or benchmark. The District Technology Steering Committee will review relevant data at their meetings held four times a year and will make recommendations for program modifications. These recommendations and modifications will be shared with stakeholders.

4. PROFESSIONAL DEVELOPMENT COMPONENT

4a. Summary of teachers' and administrators' current technology proficiency and integration skills and needs for professional development.

In June 2008, an EdTechProfile Technology Assessment Profile report provided responses from about 550 LAUSD administrators. Table 6 summarizes those results. In overall computer knowledge and skills, 78% of administrators scored intermediate or proficient, with strengths in general skills, word processing, email, and weaknesses in spreadsheet and database applications.

TABLE 6: Administrator Computer Knowledge and Skills
EdTechProfile Technology Assessment Profile
Data is included for 550 administrators, 13% of the District total

	Not applicable (Non-User)	Beginning	Intermediate	Proficient
Overall computer knowledge & skills	2%	20%	45%	33%
General computer knowledge & skills	1%	11%	45%	43%
Internet skills	1%	19%	47%	33%
Email skills	1%	13%	38%	48%
Word processing skills	1%	10%	32%	58%
Presentation software skills	9%	23%	32%	36%
Spreadsheet software skills	10%	29%	37%	25%
Database software skills	15%	31%	30%	24%

Results of a June 2008 EdTechProfile classroom teacher Technology Assessment Profile report are shown in Table 7, representing about 13,698 LAUSD teachers, mostly in middle schools. Of respondents, 65% are experienced computer users scoring intermediate or proficient in overall computer knowledge and skills, well capable of using technology to present instruction and of teaching technology skills to most students. Strengths are general computer knowledge and skills 81% intermediate or proficient) and word processing (83%). Weaknesses are skills in spreadsheets (50% beginning or non-users, and databases (59%).

Thirty-five percent of respondents to the Technology Assessment Profile said they need opportunities to participate in professional development focused on basic computer/technology skills. In order to meet the goals of the Plan's Curriculum Component, it is estimated that a quarter of the staff will need assistance in developing skills in word processing and general computer skills (such as basic troubleshooting), a third will need to improve email and Internet searching skills, and half will need instruction in spreadsheet, database and presentation programs.

TABLE 7: Teacher Computer Knowledge and Skills
EdTechProfile Technology Assessment Profile
Data is included for 13,698 teachers, 38% of the District total

	Not applicable (Non-user)	Beginning	Intermediate	Proficient
Overall computer knowledge & skills	3%	31%	44%	21%
General computer knowledge & skills	1%	17%	50%	31%
Internet skills	3%	26%	44%	28%
Email skills	3%	26%	39%	33%
Word processing skills	2%	15%	35%	48%
Presentation software skills	14%	30%	27%	28%
Spreadsheet software skills	15%	35%	32%	18%
Database software skills	25%	34%	26%	15%

Tables 8 and 9 show the results of the two sections of the Technology Assessment Profile dealing with skills in integrating technology into the curriculum. In these areas, to score proficient and, in certain questions, sometimes even intermediate, teachers must not only meet each standard themselves, but must know how to teach students to do similar things, and must report that their students have learned these skills.

On the California Commission on Teacher Credentialing (CCTC) Teacher Preparation Program Standard 9 questions of the Technology Assessment Profile, 7% of teachers scored proficient, with strengths being online collaboration (21% proficient) and records management/ communication (23%). Areas of weakness include evaluation and selection of educational software (66% beginning or non-users), knowledge of law, policy, and safety issues (61%), and use and evaluation of electronic research tools (67%).

On CCTC Induction Standard 16 questions, 6% of teachers scored proficient, with relative strengths noted in the use of data to assess and communicate student learning (14% proficient) and the use of technology resources in curriculum-aligned lessons (12% proficient); weaknesses include the creation of technology-enhanced lessons (61% beginning or non-users).

TABLE 8: Standard 9, Using Technology in the Classroom Data is included for 13,698 teachers, 38% of the District total					
9a, 9f, 9g concern knowledge and use of resources in lessons					
9d and 9e concern communication					
9h and 9i concern information literacy skills					
9f and 9i concern policy and law					
In order to be "Proficient" in each sub-standard, teachers must have taught students how to accomplish each skill.					
		Not applic. (Non-User)	Beginning	Intermediate	Proficient
Standard 9 Overall		11%	50%	32%	7%
9a	Use of technology appropriate to lesson content and student abilities/skills	6%	45%	36%	14%
9b	Knowledge of research & best practices in technology in education	15%	45%	31%	10%
9d	Record management; communication through printed- or multi-media	7%	34%	35%	23%
9e	Online collaboration	11%	39%	28%	21%
9f	Knowledge, selection and use of tech resources according to District policies to meet individual student needs	18%	42%	30%	10%
9g	Evaluation and selection of educational software	21%	45%	29%	5%
9h	Use and evaluation of electronic research tools	23%	45%	23%	9%
9i	Knowledge of law, policy, and safety issues	18%	43%	25%	14%

TABLE 9, Standard 16: Using Technology to Support Student Learning

Data is included for 13,698 teachers, 38% of the District total

16a and 16b concern communication using technology

16d and 16e concern student information literacy skills

16f and 16g concern assessment

In order to be "Proficient" in each sub-standard, teachers must have taught students how to accomplish each skill.

		Not applic. (Non-User)	Beginning	Intermediate	Proficient
Standard 16 Overall		16%	51%	27%	6%
16a	Communication using a variety of electronic media	13%	51%	30%	6%
16b	Use of computer-based collaborative tools	25%	51%	17%	7%
16c	Use of technology resources in curriculum-aligned lessons	5%	40%	43%	12%
16d	Development of student information literacy & problem-solving skills for lifelong learning	16%	43%	31%	10%
16e	Creation of technology-enhanced lessons for students to plan, locate, evaluate, select and use information for problem-solving; creation of effective learning environments; evaluation of technology use and quality of student products	19%	42%	32%	7%
16f	Use of data to assess and communicate student learning	28%	39%	19%	14%
16g	Evaluation, monitoring, and adjustment of technology-enhanced lessons	28%	39%	27%	6%

Of teachers responding to the Technology Assessment Profile, an overwhelming 84% stated they need opportunities for training on integrating technology into the curriculum.

As demonstrated by data included the above charts, the Plan's Curriculum Component Section 3d's emphases on enhancing student engagement and achievement in core content areas, increasing teacher use of technology to deliver direct instruction, and increasing student use of technology for research and productivity will require training for most teachers in Standards 9b, 16b, 16e, and 16g.

The following Technology Assessment Profile chart (Table 10) shows teacher proficiency in the components of information literacy, including Internet safety and ethical use (Curriculum Component sections 3e, 3f, and 3g). At most, 20% of teachers score proficient in any one area, meaning that they both know these skills and have taught their students similar skills. One quarter to one half of teachers say they know little or nothing about legal and safety issues in regard to technology or about District Acceptable Use Policies. Many teachers will need professional development in Internet safety and legal issues and information literacy skills in order to be able to successfully teach these skills to their students and monitor student use of technology.

TABLE 10, Information Literacy Component Proficiency
Data is included for 13,698 teachers, 38% of the District total

		Not applic. (Non-User)	Beginning	Intermediate	Proficient
9h	Use and evaluation of electronic research tools	23%	45%	23%	9%
9i(1)	Knowledge of state and federal laws for uses of computer based technologies	19%	43%	24%	14%
9i(3)	Knowledge of Acceptable Use Policies, safety, and health issues	14%	44%	21%	20%
16d	Development of student information literacy & problem-solving skills for lifelong learning	16%	43%	31%	10%
16e(1)	Creation of opportunities to engage students in planning, locating, evaluating, selecting and using technology resources for problem-solving	22%	42%	26%	10%

As expressed in the Technology Assessment Profile, teacher preferences for technology training venues at their schools were one-on-one informal training (27% of respondents), small group training (75%), and online web-based training (30%). Preferences for when technology training should be offered were during the school day (62%), after school (36%), in the evening (9%), on weekends (17%), and off-track or during the summer (38%).

4b. Plan for providing professional development opportunities based on the needs assessment and the Curriculum Component.

Professional development opportunities will be offered to administrators, teachers, and support staff based on the needs assessment described above (4a) and the Education Technology Plan's Curriculum Component goals, objectives, and action plan. Training will focus on implementing

the technology components of adopted materials, providing teachers with the level of technology proficiency necessary to be able to teach their students relevant technology and information skills; teaching staff how to use Periodic Assessment data to improve instruction; and helping teachers use District technologies to communicate with parents. Technology training will, as much as possible, be part of the District's ongoing professional development efforts in grade level/content area curriculum PD programs, to minimize time burdens on teachers.

LAUSD has a history of innovative professional development delivery models to accommodate its large staff, including: Coach Mentor models (IMaST grants supported through a partnership with CTAP Region 11); higher education partnerships with California State Universities, Loyola Marymount University, and others who provide input to enhance program improvement, with additional opportunities for professional development and teleconferencing of experts with teachers. The majority of technology-related professional development has historically been voluntary, with the exception of certain grant-mandated training efforts.
Technology-related professional development from 2007 to 2009 representing more than 14,000 hours provided to about 6,000 teachers, coaches and administrators, as reported by Learning Zone records and the Educational Technology Group, included the following:

- I/T Training
- ITAF-led professional development
- Teach the Teachers
- CUE Conference sessions
- InfoTech sessions
- CTAP Academies, District Intern
- LACOE sessions
- CAMSP
- AP Readiness
- Riordan Foundation Video Conferencing
- Private Schools Program
- NikeGO
- Improving PE through Technology
- NECC Conference sessions
- Digital Path
- Secondary Mathematics Initiative
- CISCO Networking Training
- Sound Mind Sound Body training
- AB 1339 Instructional Tech for Improving PE
- UCLA Computer Science
- Thacher Institutes
- EETT Competitive Grant Programs Coach and Target Teacher Training
- IMaST EETT Teachers
- Local District
- Virtual Collaboration Sessions
- Thacher Moodle Learning Objects

Professional development may follow several formats. Instructional Technology Application Facilitators (ITAFs), academic coaches and teacher librarians who have been provided with specific technology integration professional development, site administrators, and/or lead teachers may receive the first round of training and be expected to go back and train or coach teachers/technology coordinators at their sites. The District currently has 18 full time ITAFs and more than 21 LACOE-trained technology coaches; most coaches are currently assigned to select middle school sites. Site-level training may consist of one-on-one, just-in-time training as needed

by teachers by site level coaches and, in some cases, peers. In other instances, local district offices will work with principals and the District using data from the EdTechProfile Technology Assessment Profile to align strengths and weaknesses with applicable professional development efforts across program areas (e.g., textbook adoptions; safe schools; other). Likewise, Student Survey assessment results may further identify professional development needs and prioritize sites for targeted programs; large groups from each site might then be trained together, forming the critical mass needed to bring about change and a strong support structure among site teachers.

In cases of specialized training (e.g. developing teacher websites, Moodle content, assistive technology, other), local district professional development may be offered to interested teachers. For example, the Educational Technology Group and the Division of Special Education might assesses student needs in assistive technology based on IEP data and the Educational Technology Group could then train special education personnel on selected technology. Classified staff will continue to be offered training to use productivity, administrative, and curriculum-support software, as required.

The District, facilitated by the Educational Technology Group, provides professional learning opportunities to help teachers implement specific instructional strategies and integrate technology into their teaching in order to meet the needs of learners. Emphasis is on the seamless integration of technology to enhance the curriculum already being taught. Sessions are delivered in a traditional face-to-face setting (classroom), online, or in a blended (online and face-to-face) environment, allowing for ongoing, continuous learning and reflection, and often make use of virtual tools such as video conferencing, and other web applications including podcasts, wikis, blogs, etc. Participants may earn salary points for many of these sessions. Both certificated and classified employees register for professional development online, via the Learning Zone http://lz.lausd.net). It is an overarching goal of this Plan that a larger percentage (currently less than 20% as of 2008) LAUSD teachers and classified staff will participate in professional learning opportunities offered during the term of the 2009-2012 Education Technology Plan.

GOAL 4b.1: LAUSD staff will have the opportunity to participate in sustained, ongoing professional development in support of the Education Technology Plan.
Curriculum Link: *LEA Plan Performance Goal/s 3; Superintendent Guiding Principles 1,2, 3 and 5*

	OBJECTIVES & BENCHMARKS:	**2010**	**2011**	**2012**
4b.1.1	By June 2012, 50% of professional and support staff will have taken part in at least 9 hours of professional development activities in support of curriculum and technology integration, as measured by Learning Zone registration and hours reported by teachers/classified staff on their annual Technology Assessment Profile response and other PD records, a growth of more than 30% over the current baseline of less than 20%.	25%	35%	50%

GOAL 4b.2: District instructional staff will acquire the skills necessary to use technology as a tool for teaching and learning

Curriculum Link: *LEA Plan Performance Goal/s 3; Superintendent Guiding Principles 1,2, 3 and 5*

	OBJECTIVES & BENCHMARKS:	2010	2011	2012
4b.2.1	By June 2012, 85% completing the Technology Assessment Profile will score intermediate or proficient in the Computer Knowledge and Skills Category (CCTC Standard 9c).	70%	78%	85%
4b.2.2	By June 2012, an average of 60% of teachers completing the Technology Assessment Profile will score intermediate or proficient on CCTC Standards 9i, 16ab, 16c, 16d, 16e and 16f, weighted equally.	40%	50%	60%

Action Plan:

	Implementation Plan, Data to be Collected, and/or Evaluation Instruments	Timeline or Schedule for Evaluation	Program Monitoring, Evaluation, and Modification Process
a	Teachers and administrators will receive training in using research-based technology to support the core curriculum, as part of SB 472, AB 430, and BTSA training.	Ongoing, 2009-12	Learning Zone posts schedule of training, maintain records; conduct and report evaluations per standard District professional development policy
b	Academic and/or technology coaches as well as ITAFs will collaborate to include overviews of and professional development options for District technology integration practices during new teacher orientation.	Spring 2010 and annually thereafter	Educational Technology Group Director monitors; updates overviews, as needed, each year
c	District will continue to provide 24/7access to the Learning Zone, a method of tracking both site and District training attended by each teacher, which includes an online registration system.	Ongoing, 2009-12	Principals ensure that teachers are aware of offerings and receive needed training; the Learning Zone is managed by District's Office of Professional Development under the Deputy Chief Academic Officer

	Implementation Plan, Data to be Collected, and/or Evaluation Instruments	Timeline or Schedule for Evaluation	Program Monitoring, Evaluation, and Modification Process
d	As a part of the process correlating technology and information skills to the Instructional Guides referenced in 3d, the corresponding skills teachers need in each grade range (K-2, 3-5, 6-8, 9-12) in order to teach students required technology skills will be determined, incorporating the 6/30/08 release of NETS for Teachers. A checklist of skills and an alignment with the Technology Assessment Profile and the District's corresponding grade 5, 8 and 11 proficiency levels will be created.	By December 2009; updated annually thereafter	Educational Technology Group staff (Director, Specialists, ITAFs, others as assigned) and identified local district and Division of Instruction designees lead and monitor the process.
e	Technology coordinators and other site technology "experts" will be identified at each site (existing administrative staff, classroom/librarian teachers and/or academic coaches) to conduct small group and one-on-one training, to bring site teachers to necessary computer application proficiency level; to train on voicemail, Periodic Assessment, ISIS record-keeping software, introduce teachers to other offerings, as needed)	Beginning August 2009, and continuing as needed for new programs	Site technology coordinators, ITAFs and other professional development providers and/or Learning Zone report quarterly on training completed; changes in proficiency status of site teachers in EdTechProfile Technology Assessment Profile results noted, as applicable
f	Site Administrators continue to receive training in how to use ISIS, Periodic Assessments and other data to drive instruction, using their own schools' data. Principals and; assistant principals receive District training as needed. Teachers discuss data in grade/content professional learning groups for analysis and use in planning instruction.	Trained by October 2009; monthly trainings and meetings each quarter thereafter	Sites and local districts receive electronic reports to monitor ISIS and Periodic Assessment use; site administrators evaluate results and make modifications in training and/or discussion group schedules

Implementation Plan, Data to be Collected, and/or Evaluation Instruments		Timeline or Schedule for Evaluation	Program Monitoring, Evaluation, and Modification Process
g	Centralized special-interest workshops such as website development, assistive technologies, Moodle content will be offered to site technology leads and individual teachers.	Annually, as interest demands	Educational Technology Group ITAFs and Specialists supervise, monitor need/demand and schedule more workshops as necessary
h	Teachers will be trained in the use of the technology components of new textbook adoptions; vendor training will be provided at beginning of implementation; peer sharing and modeling of best practices will continue on site, as teachers develop experience with the text series.	See new adoption implementation timeline, Section 3	Per standard District professional development assessment policy and Learning Zone records
i	Teachers will be offered training on the operation and instructional uses of hardware and peripherals such as projectors, laptop computers, interactive whiteboards, student response systems and digital cameras as needed (one-on-one, site-based, online, or local district-sponsored workshops).	Ongoing, 2009-12, as equipment is acquired	Site technology coordinators, ITAFs and other professional development providers and/or Learning Zone report quarterly on training completed; changes in proficiency status of site teachers in EdTechProfile Technology Assessment Profile results noted, as applicable
j	Teachers, administrators, and classified staff will be offered multiple training venues in productivity applications such as Microsoft Office, Inspiration and others for personal and instructional use (one-on-one, site-based, online, or local district-sponsored workshops).	Ongoing, 2009-12, as needs are determined	Site technology coordinators, ITAFs and other professional development providers and/or Learning Zone report quarterly on training completed; changes in proficiency status of site teachers in EdTechProfile Technology Assessment Profile results noted, as applicable

Implementation Plan, Data to be Collected, and/or Evaluation Instruments		Timeline or Schedule for Evaluation	Program Monitoring, Evaluation, and Modification Process
k	Training (one-on-one, online, at site meetings, and/or District workshops) will be developed and offered in the areas of Standards 9f (knowledge, selection, and use of technology resources to meet student needs), 9g (evaluation and selection of educational software), 9h (use and evaluation of electronic research tools), 16d (development of student information literacy and problem-solving skills), 16e (creation of effective lessons and learning environments, evaluation of technology use and student products), and 16g (evaluation and monitoring of technology-enhanced lessons).	Ongoing, 2009-12; most decisions made semi-annually based on Technology Assessment Profile and teacher and administrator requests	Site technology coordinators, ITAFs and other professional development providers and/or Learning Zone report quarterly on training completed; changes in proficiency status of site teachers in EdTechProfile Technology Assessment Profile results noted, as applicable
l	Internet Safety and ethics training (e.g., iSafe, copyright, cyberbulling) will be provided to administrators, teachers, students and parents per roll out plans developed in 2008-09 school year, facilitated by the District's Educational Technology Group.	Ongoing, 2009-12; most decisions made semi-annually based on Technology Assessment Profile and teacher and administrator requests	Site technology coordinators, ITAFs and other professional development providers and/or Learning Zone report quarterly on training completed; changes in proficiency status of site teachers in EdTechProfile Technology Assessment Profile results noted, as applicable
m	As appropriate, classified staff will be surveyed for technology training needs and will continue to be provided with access to classroom and online training.	Survey by August 2009;and each year thereafter	Learning Zone records
n	Site administrators include teacher use of technology in instruction as they conduct their standard classroom walkthroughs to observe teachers,	Daily/Weekly, aggregated per standard District policy, beginning Spring/Fall 2010 and continuing	Site administrators aggregate data, use it to determine further need for teacher professional development, per standard District policy

Implementation Plan, Data to be Collected, and/or Evaluation Instruments		Timeline or Schedule for Evaluation	Program Monitoring, Evaluation, and Modification Process
o	Teachers and administrators take the EdTechProfile Technology Assessment Profile annually to monitor proficiency in computer skills and curriculum integration.	Annually in the spring	Processes monitored by sites and local districts. Results will be examined and made available to all relevant PD program facilitators and changes made as necessary.

4c. Monitoring Process for Professional Development Component

The District's standard monitoring and evaluation process for professional development will be applied to all Education Technology Plan professional development activities

Monitoring Activity	Person Responsible	Schedule
Hold Professional Development sessions; keep agendas and sign-ins and/or use Learning Zone for record keeping; trainers send site's training records to site administrators/District monthly per District standard monitoring process; collect and analyze participant evaluations and make adjustments to training.	Trainers (tech coordinators; ITAFs, other providers); site administrators; local district PD staff; Assistant Superintendent, Professional Learning, Development, and Leadership	July 2009 – June 2010
Keep records on Professional Development received by each teacher (coach/lead records, site and district spreadsheet or database, on-line PD registration records).	Coaches/tech coordinators; site administrators; local district PD staff; Assistant Superintendent, Professional Learning, Development, and Leadership	July 2009 – June 2010

Monitoring Activity	Person Responsible	Schedule
Teachers take the Technology Assessment Profile. Site administrators do classroom walkthroughs. Those responsible for training analyze data and decide on course modifications for the coming year.	Teachers site administrators local district PD staff; Assistant Superintendent, Professional Learning, Development, and Leadership	August-September 2009
Review overall District technology professional development activities and results	Chief Technology Director, Director Educational Technology Group	November 2009-June 2010
• *Repeat this procedure each year of the Plan* • *Report to Chief Academic Officer's Office and Governing Board as applicable*	*Assistant Superintendent, Professional Learning, Development, and Leadership*	*Annually, per above schedule*

5. INFRASTRUCTURE, HARDWARE, TECHNICAL SUPPORT, AND SOFTWARE COMPONENT

5a. Existing hardware, Internet access, electronic learning resources, and technical support that will be used to support the Curriculum and Professional Development Components.

AND

5b. Hardware, electronic learning resources, networking and telecommunications infrastructure, physical plant modifications, and technical support needed to support the Curriculum and Professional Development Components.

Hardware:

Computers:

Existing: The following chart shows per-District ratios of students to instructional computers and students to "up-to-date" computers per CDE definition (those 48 months old or less) in Spring 2008, as per 2008 enrollment data and the 2008 California School Technology Survey. The Chart also shows numbers of computers in classrooms, labs, and libraries per the 2008 California School Technology Survey.

Total Computers	Student: Computer Ratio	Up-to-date Comp. <4 yrs	Student: up-to-date Comp. Ratio	# of comp. in class-rooms (all types of comp.)	# of comp. in labs	# of comp. in libraries	# of comp. on mobile carts (mobile labs)
169,739	4.09:1	82,085	8.45:1	98,312	29,051	5,127	31,959

The following chart shows the age of computers as shown on the 2008 California School Technology Survey, along with expected new acquisitions for 2008-2009.

# of comp	<1 yr old	>1 and <2	>2 and <3	>3 and <4	>4 years	To add 08-09
169,739	14,546	20,489	22,936	24,114	87,653	18,000

Need: The projections that follow for the purpose of implementing this plan indicate the number of computers for student and teacher use based on a District-wide student to up-to-date (less than 48 months old) to achieve a computer ratio of at least 6.9:1 by June 2012, which falls within the current District minimum range. The District continues to explore methods of achieving ubiquitous student access to appropriate technology tools so that the ratio of students to computers is under 7:1, or better.

To be Acquired: The following chart shows the number of computers to acquire each year in order to meet the aforementioned minimum District computer access goals by 2012:

	08/09	09/10	10/11	11/12
Carryover number of computers	94,247	88,133	90,197	91,708
Less computers becoming >48 mos.	24,114	22,936	20,489	14,546
Add new computers to be purchased*	18,000*	25,000*	22,000*	20,000*
Total of up-to-date computers	88,133	90,197	91,708	97,162
Projected enrollment	686,700	679,833	673,034	673,034
Student: up-to-date computer ratio	7.8	7.5	7.3	6.9

*NOTE: as previously noted, purchasing "new computers" may additionally include a variety of mobile learning devices, virtual desktop systems, blade computing, creative lease options and other concepts currently under exploration by the District to maximize student access to appropriate technologies in order to meet the various instructional goals set forth in this plan.

Peripheral Devices (Printers, Projectors, Whiteboards, Handhelds, etc.):

Existing: Schools are utilizing and requesting more projection devices, probes, handheld computers, digital microscopes, interactive digital white boards, printers, multi-function devices, and digital cameras. The ability to project to and interact with large groups using interactive white board technologies, projection devices, visualizers, and data projectors is not universally available throughout the District. Many Title I schools have more funds to spend on technology than non-Title 1 schools, and as such may have made considerable investments in peripherals creating a potential site by site inequity with regard to accessing these technologies.

Between 2006 and 2009 LAUSD assessed several peripheral pilot programs, including those part of recent EETT-Competitive grants, surveyed teachers desires for such peripherals and began a purchasing and rollout process to provide desired instructional learning tools, one example of which was the Instructional Multimedia Cart (IMC) program whereby the District purchased one such cart for rotation in every elementary school.

Need: The District will continue to refine minimum configuration specifications for instructional learning tools and peripherals and extend promising pilot programs to assess the impact of such devices on student achievement, with ongoing development of procurement plans for peripheral devices that align with professional development and workstation deployment; the estimated ongoing need for peripherals

To be acquired: Based on desired classroom access to a networked printer, electronic whiteboard, a set of grade or department-shared set of student response devices and a projection cart, for use during instruction by students, classroom and librarian teachers to meet instructional goals set forth in this plan, it is estimated that the above types of peripherals will be acquired for an average of three classrooms per site over a 5-yr cycle (175 sites per year/515 classrooms per).

Electronic Learning Resources/Administrative Software:

Existing: Electronic Learning Resources (ELRs) are defined in this plan as all of the software components in any format, individual CD, online, via network servers, etc., necessary to meet the goals of both the Curriculum Integration and Professional Development sections. There are two distinct categories of ELRs referenced in this Education Technology Plan - the first is referred to in this Plan as **Learning Applications**, which are used to support and complement curriculum. The second is referred to as **Administrative Applications**, which both administrators and teachers use (such as student information systems, decision support systems, and financial systems) to support effective instructional planning and operations of the school environment.

There are a number of current resources available to enhance teaching and learning that go beyond accessing the Internet or having an office suite available for word processing, spreadsheet development, or presentation. These applications include CDs and website included in state-adopted textbooks/supplements; CLRN-approved and content-specific programs to support attainment of, in particular, mathematics and language arts content standards (by such publishers as Carnegie, Explore Learning, Scholastic, Vantage, among many others); learning services from Apex and the Community College Collaborative to individualize instruction for all learners; subscription access to reference libraries such as those from Britannica, World Book, Grolier, etc; streaming media services such as those provided through LACOE, Discover and The Futures Channel; video conferencing learning such as those provided by NASA, PORTS and other The District's expanding Online Learning Programs (including AP courses, select A-G courses, and supplemental programs using Moodle shells and content) are also key aspects to the District's electronic learning application resource base, all of which were referenced in Section 3d.

In terms of administrative applications, there are currently **six major systems** that fall under this category, which include 1) ISIS (Integrated Student Information System), 2) CLAS (Centralized Library Automation System), 3) BTS (Business Tools for Schools), 4) DSS (Decision Support System), 5) Welligent (Special Education and Health Services System) and 6) Princeton Review's Periodic Assessment. ISIS and Periodic Assessment data, which will be utilized by all teachers, were covered in detail in Section 3i of this plan.

Upgrades to the administrative systems have and will assist the District to more efficiently collect and report required data to local, state, and federal agencies as well as better inform instructional decisions and communicate with homes. Thus the upgrade and improved interoperability of these systems goes far beyond improved efficiency by enabling the District to assess and forecast student performance and modify curricula to maximize teaching and learning. The District is working ensure that all such administrative applications are designed and implemented to transparently interoperate.

The six major systems are the foundation of the application interface strategy. Interfaces from the system of record to the peripheral applications are being established along with the frequency of refresh from near real-time (messaging system) to batch schedule (nightly, weekly, monthly).

To ensure the interoperability of the six major District-wide system implementations (ISIS, CLAS, BTS, DSS, Welligent and Princeton Review) the data warehouse architecture was redesigned to encompass all of these systems transparently without redundancy of information and process. A Collaborative Administrative Application Team was established. Currently, all applications / projects are managed by the ITD Software Group. Interfaces have been established to keep systems in synch.

Need: Learning Applications: As more and more applications become available via the Web, LAUSD will establish instructional network accounts for both teachers and students, as per this plan. LAUSD will continue to identify professional practices and successful, research-based instructional applications for systematic integration across LAUSD, based on various past pilots. It is estimated that the number and types of products, subscriptions and other services to meet the learning application needs will grow substantially during the term of this Plan.

Administrative Applications: The inventory all data fields and application responsibilities are in the process of being completed. The system of record per information item is being identified and is the source for all peripheral applications through the interface strategy. The project team will begin work with application vendors to refine data structure. Legacy applications are being modified to accommodate the change in key data items (e.g. employee ids were 6 digits in HRS, are now 8 digits in BTS.)

To be Acquired: See Networking Infrastructure for network accounts information. Acquire learning applications software/subscription services as applicable, based on each site's strategic areas of instructional and administrative needs, the availability of site/District resources, and estimated average school enrollment.

Internet Access / Telecommunications and Networking Infrastructure:

LAUSD has identified four major telecommunication project areas that work to achieve greater access, improved safety, and cost efficiencies and enable the desired results in teaching, learning and home/school communications across the District:

- Metropolitan Area Network (MAN) deployment
- Converged Telecommunication Systems (including LAN Modernization)
- Radio Systems Modernization
- Critical IT Resources for Schools

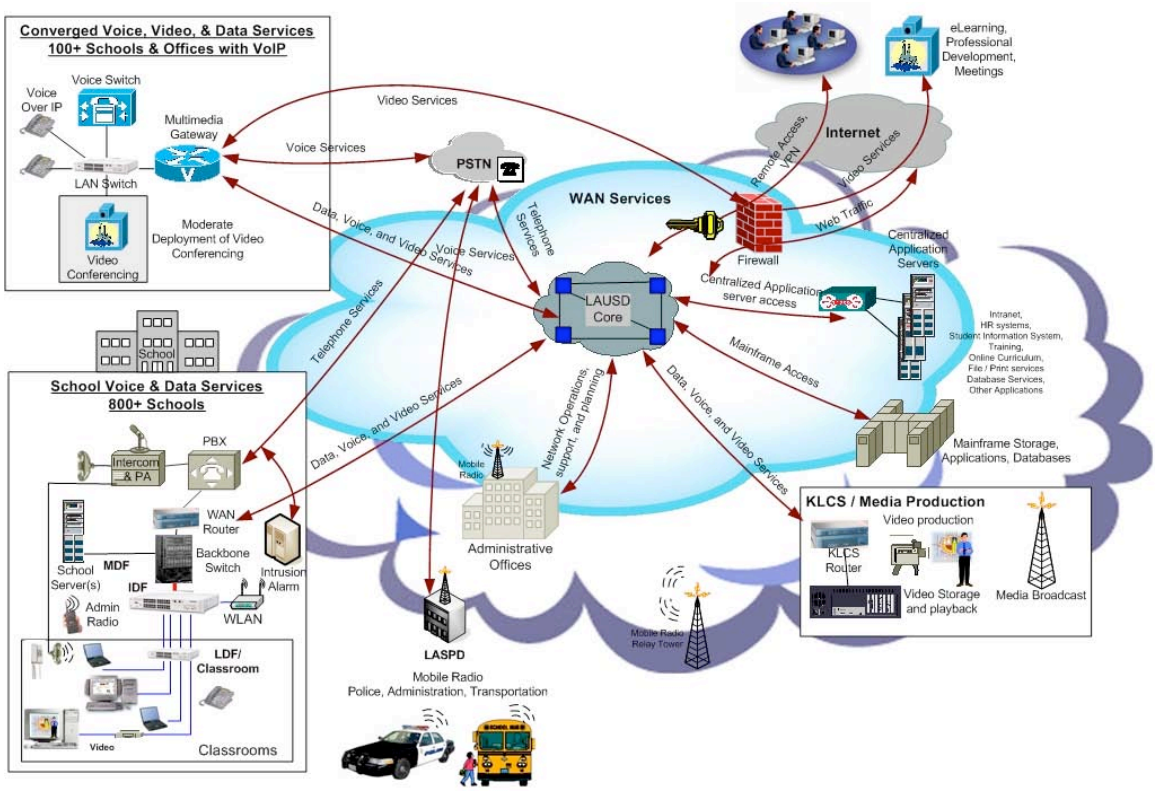
The following high-level diagram illustrates the District's information technology infrastructure systems supporting critical information delivery and security services, including, but not limited to:

- The Wide Area Network (WAN) and Metropolitan Area Network (MAN) that includes data and voice equipment and circuits which connects all District offices, schools, and other locations to District and Internet resources, school, and office site Local Area Networks (LANs) that provide data and, in some cases, voice communications

• Telephones, voice circuits, Private Branch Exchange (PBX), or basic telephone equipment. Public address and intercommunication systems to connect classrooms to offices for voice communication

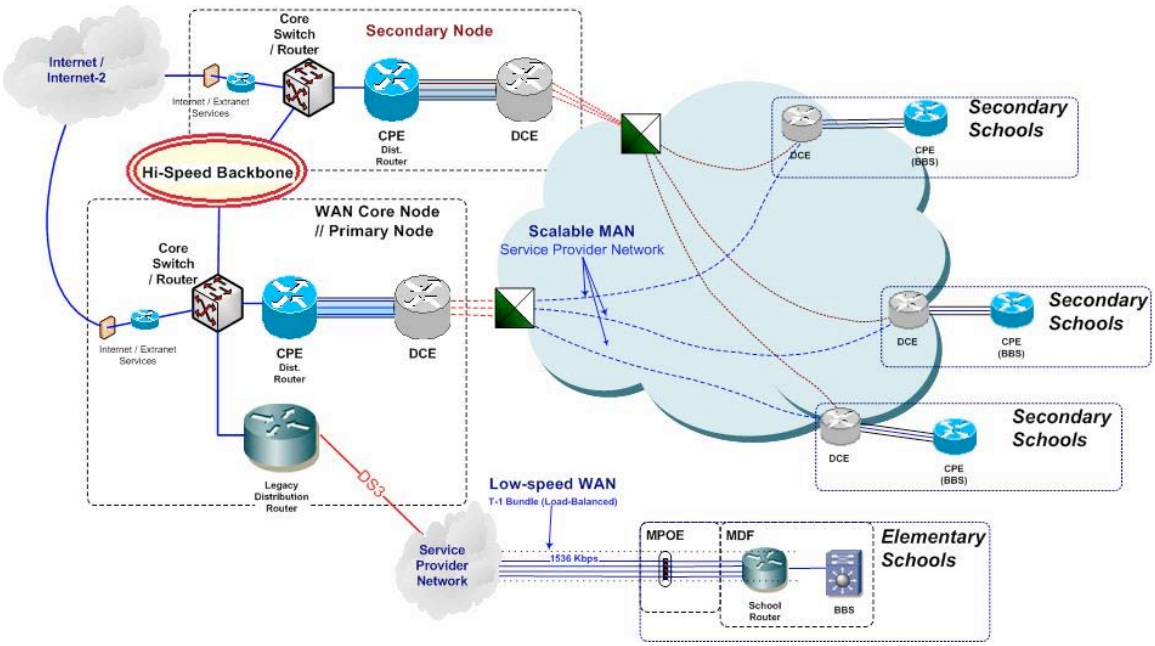
• Cellular and radio services for on-campus safety and for transportation and school police communication

• Intrusion alarms



Data Network:

Existing: The WAN is that network that connects all schools within the LAUSD to each other via a combination of DSLAM, T-1, DS-3 circuits, Metropolitan Area Network (MAN), and fiber. The current District WAN is comprised of T-1's from a majority of schools connected back to the central office via DS-3's. In addition, there are several schools that are connected back to the District office via fiber connections with adjustable data transmission speeds. The majority of Early Education Centers (EECs) are connected to the District's WAN via T-1s for data and voice services. The Option Schools now have basic connectivity to the District WAN. Additional sites are either currently or planned for adjustable transmission rate MAN connectivity.

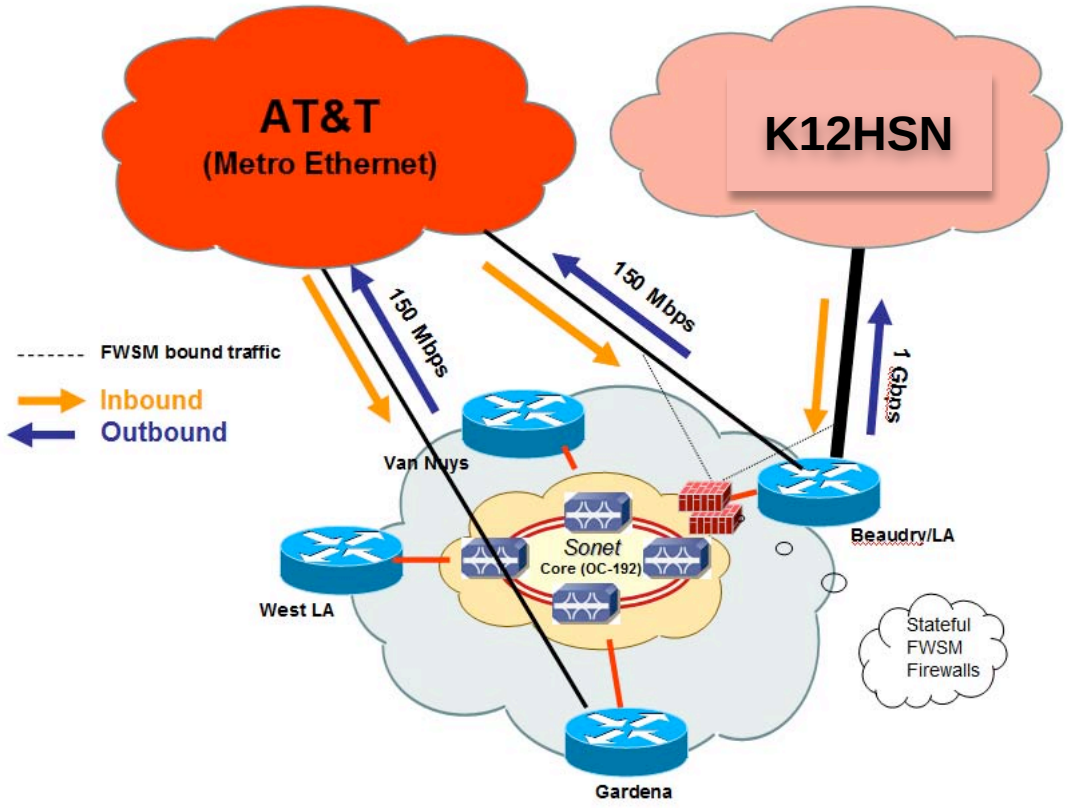


The LAN is comprised of all of the components within a school or District facility that interconnect workstations and peripherals within that same school or facility in order to share District/school resources, such as file servers or Internet access. Various administrative applications including ISIS, CLAS, BTS, DSS, Welligent and Princeton Review (Periodic Assessments), as well as increased usage of Internet service for instructional learning and the desire to expand instructional services to include video streaming and conferencing in order to meet instructional goals, have and will continue to require that affected LAUSD LANs are reliable and robust enough to handle the increasing traffic demands. Therefore, the District will continue to maintain specifications and standards for procurement, installation and maintenance of all District LANs to ensure that interconnectivity between devices within each school or District facility is efficient and reliable to meet LAUSD educational technology goals.

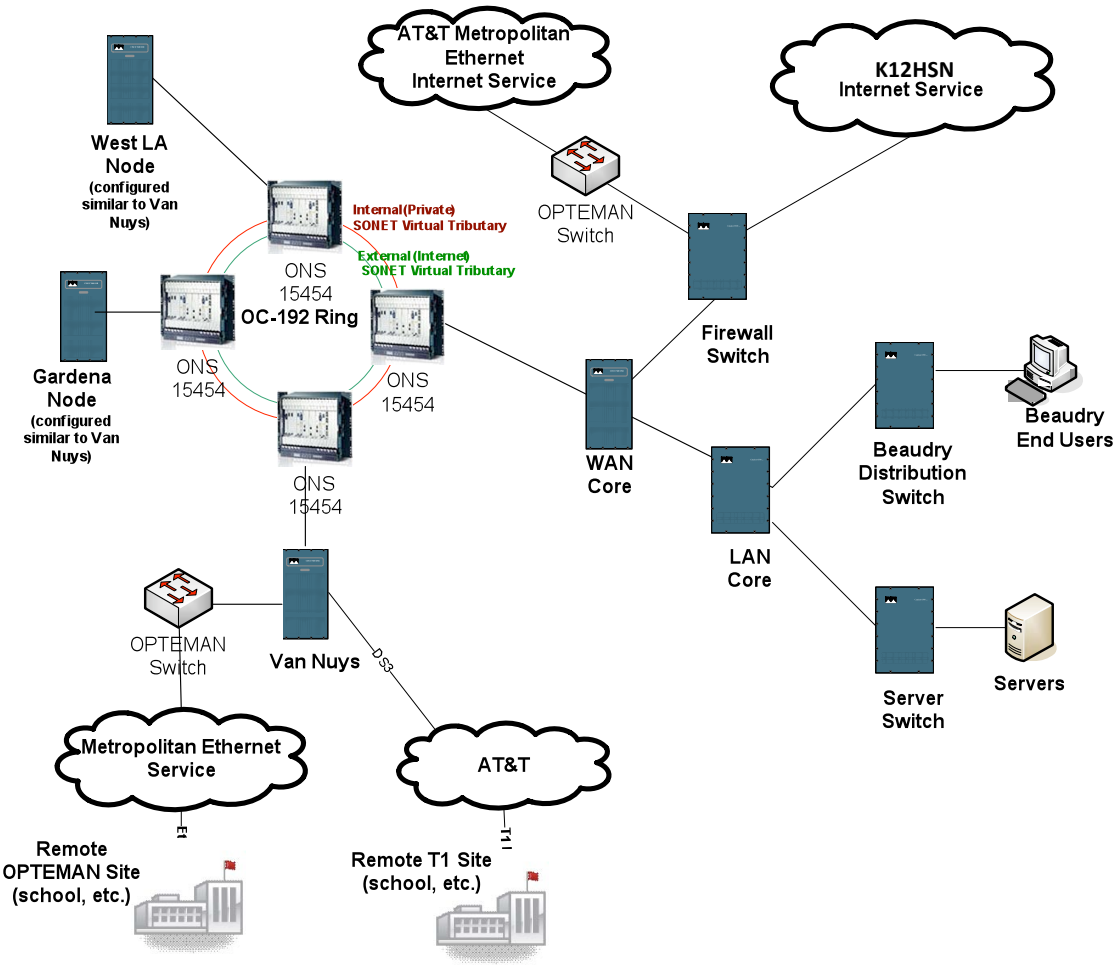
All schools and offices connect to one of four nodes (333 South Beaudry Ave., Van Nuys, Gardena, and West Los Angeles) that make up the District's Wide Area Network (WAN). Each node site has equipment necessary to access District central instructional and business resources and the Internet. The District has restructured and modernized parts of the WAN to increase bandwidth, services, security, reliability, and cost efficiencies:

- Replaced end-of-life leased equipment at the Van Nuys node
- Installed equipment and circuits to accommodate new schools

- Consolidated circuits on the new equipment
- Redesigned the network to reduce equipment and circuit needs at the Gardena and WLA nodes
- Balanced data traffic to improve efficiencies



Every K-12 school is connected to the Internet via a minimum of a DSL connection from the school to the District WAN/MAN. Most K-12 schools are connected to the District's WAN by 1 to 4 T-1 connections from the school to the District's WAN. A project is currently underway to deploy MAN services to school sites, based upon demands for instructional use. The District's WAN has three connections to the Internet, two connections via AT&T MAN and the other via K12HSN.



The strategic initiatives include WAN Core Modernization and Enhanced WAN Services.

The ITD has developed a WAN Capacity Management Program and Plan to forecast future bandwidth requirements. In general, secondary schools receive up to four T-1s and then move to scalable MAN based upon demands and available funding. The WAN core has been modernized to adapt to various technologies such as MAN, DS-3, T-1, DSLAM.

Wireless LAN (WLAN) has been added to 149 schools; based on current modernization and new construction projects, it is projected that 315 additional schools will be provided with WLAN in the next three years to enable the flexible learning environments and maximize available learning devices to more schools in order to meet the goals of this plan.

LAN architecture and specifications have likewise been modified to meet growing instructional and classroom administrative support needs.

Need:
The bandwidth demands of the WAN are increasing exponentially with the growing deployment of instructional video applications and large number of students concurrently accessing the Web during instructional projects. Combining this usage with increased integration of Business Tools for Schools, the desire to expand video conferencing for student AP and other Online Learning Program courses as well as for teacher professional development, it becomes evident that a scalable and reliable MAN is essential to the success of the overall technology plan. Therefore, the District will evaluate future bandwidth requirements to sufficiently meet the various traffic demands of applications and users in order to determine if the current WAN should be modified, upgraded, and/or redesigned. The current roll out schedule calls for 50 secondary sites per year, fiber to all secondary schools, and/or elementary schools based on high-need.

Although all of the schools currently have access to the Internet, the quality of this connection at the classroom level is no longer adequate for daily instructional use because of low bandwidth and quality of service controls from schools to the District's WAN and vice versa. The WAN backbone will be re-evaluated in order to meet growing demands and to provide acceptable service performance; LAN architecture and specifications will continue to be modified to meet growing instructional and classroom administrative support needs. Internet bandwidth will continue to be monitored and scale up/down as needed if necessary

The additional increase in traffic on school LANs in support of instructional and safety systems also require the District to continually assess and enhance the LANs as demands dictate. The IT Infrastructure Strategic Execution Plan (SEP) implements a number of the infrastructure-related initiatives outlined and described in the District's IT Strategic Plan and Architecture, including complete assessment, strategic and execution plans for each site, LAN upgrade (modernization) projects which will replace outdated electronics, installation of new cabling and replacement of deteriorated cabling as needed, and/or installation of wireless capability to accommodate increased number users requiring LAN access via Wireless LAN (WLAN) technologies. The scope provides for a single integrated network that will provide an acceptable performance level and accommodates increased bandwidth and security requirements. Installations that support instructional and administrative needs while reducing ongoing maintenance and support costs are uniform, use industry best practices, and are standards-based. Increasing bandwidth to school projects is thus in progress

The CIO has identified a need for and potential funding to support the Big 6 Desktop Monitoring System project, which will be a part of this plan.

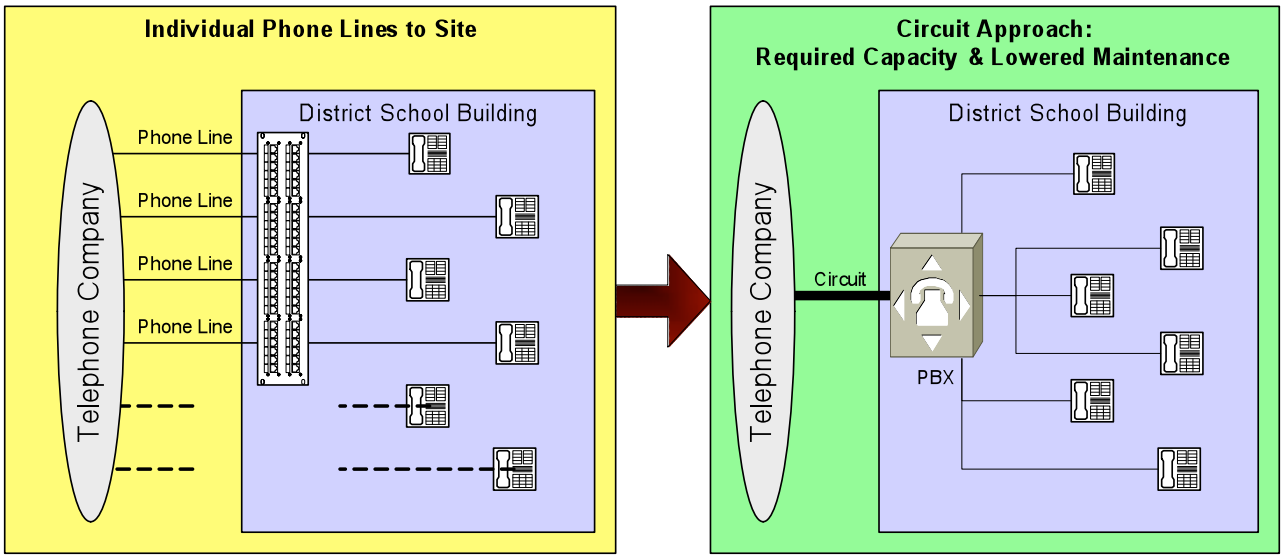
To be acquired: MAN service as described above to 50 secondary sites per year, fiber to all secondary schools, and/or elementary schools based on high-need. WLAN added to 315 schools, an average 105 per year; LAN modernization, as previously described, provided to 516 sites (173, 90 and 53 schools per year, respectively) by 2012. Big 6 Desktop Monitoring Project implementation budget.

<u>Phone Systems</u>:

Existing: Provided in tandem with the WAN are telecommunications services including access

to the Public Switched Telephone Network (PSTN) for dial tone, cellular service, long distance access, pagers, etc. The mainstream use of technologies such as Voice and Video over IP combined with the affordability of higher speed WAN connectivity have demonstrated that considerable efficiencies can often be realized when large scale institutions converge their voice and data networks.

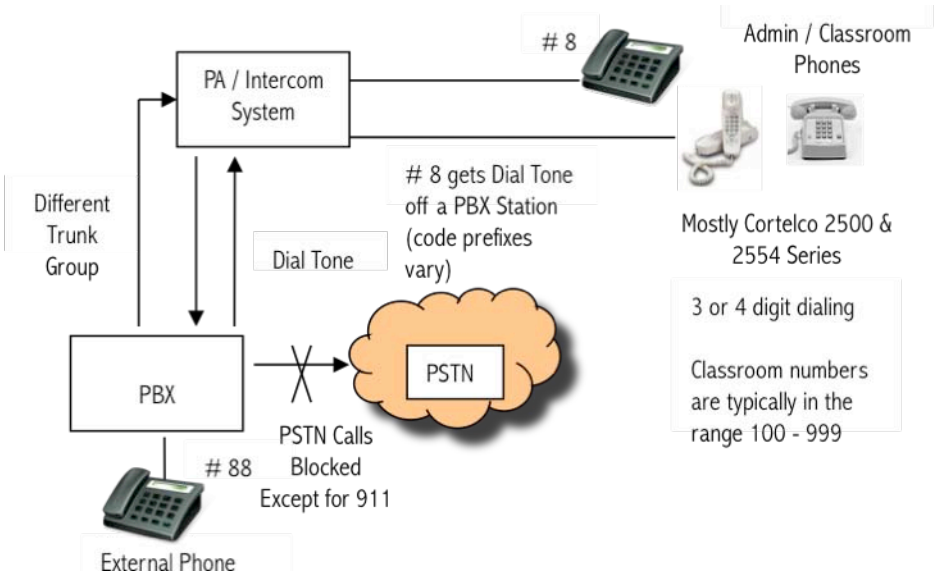
As classrooms were connected to the school's main telephone switch, the demand for more telephone lines increased. The Telephone Line Consolidation project addressed this need by consolidating telephone lines and circuits and consolidating multiple telephone systems into one system at 130 schools where limited cables are available.



This project was completed in December 2007. The project redesigned the voice solution and consolidated telephone lines and systems into one at 125 locations (reduced scope) to meet increased demand. Intuity systems were also installed at 64 of the sites to provide voicemail due to additional telephone system needs.

The Emergency Assistance (911) project will be completed by December 2009 and addresses the need for teachers, staff, and students to be able to access 911 emergency services from all classrooms. The establishment of the 911 emergency services access has been coordinated across the District's Facilities Services Division and ITD. Through ongoing Safety and Technology projects, the Facilities Services Division is installing the PA/Intercom console, cabling to the classroom, classroom phones, and connecting the completed PA/Intercom system into the PBX to achieve 911 access from classrooms (see diagram below.)

As of June 2008 the District is currently providing 911 access from over 31,000 classrooms and offices at approximately 800 schools.



The School Site Telephone Wiring project is in progress (included in the LAN modernization project) and addresses the needs of nine schools that are currently experiencing problems with phone communications. These sites have deteriorating and failing due to telephone wiring that is over 40 to 50 years old. The project scope is to replace the deteriorating wiring at the eleven schools to provide reliable service and reduce maintenance costs.

Need: Open communication between teachers, staff, and parents is essential to the success of the District in meeting its instructional goals as set forth in this plan. LAUSD believes that considerable efficiencies may be realized if the District were to continue integrating technologies such as VoIP and Video over IP into the LAN/WAN infrastructure, reducing operating costs within the telecommunications budget and making those savings available for other technology needs such as a WAN Upgrade or technical support.

To be acquired: The Information Technology Division's scope is to replace the severely deteriorating telephone wiring at nine school sites to provide reliable service and reduce maintenance costs. To reduce costs, these projects were bid as part of the LAN Modernization projects.

Physical Plant:

Existing: To ensure that Renovations and New Construction Strategic Execution Plans (SEPs) have adequate electrical power and data cabling to accommodate the technologies defined within this plan, the IT department will work with facilities to modify and amend all specifications pertinent to technology, specifically those within Division 25 of the Construction Specification Institute (CSI).

Need: Adequate electrical power and data cabling to accommodate the technologies defined within this plan at existing sites and the estimated 31 new sites scheduled to be completed between 2009-12, per the Master School Program schedule.

To be acquired: Items to be acquired will be determined per the IT Strategy and Architecture Project Division 25 Specifications and other requirements of New Construction Strategic Execution Plans.

Technical Support:

Existing: Technical Support is defined in this plan as all of the resources necessary to guarantee efficient operations of Technology Hardware, Electronic Learning Resources and Network and Telecommunications Infrastructure. Components under this category of the plan include but are not limited to operational staff, help desk tools, and personnel and maintenance contracts, all of which are dedicated to maintaining and enhancing instructional and administrative technology hardware and software.

LAUSD's Information Technology Division is organized as follows:

The head of the Information Technology Division is the Chief Information Officer (CIO) along with a Deputy CIO. The CIO manages the following departments:

- Administrative Services Unit performs Division-wide financial, personnel, business, and contract services for the IT branches.
- Special Assistant to the CIO develops and oversees ITD technical training, public relations, financial reporting, and risk management.
- Educational Technology Group coordinates educational technology in support of the Superintendent's instructional goals to provide students and teachers with access to quality instructional resources and programs. Provides online learning opportunities through its Los Angeles Virtual Academy (LAVA).
- Enterprise Applications provides quality assessment and testing for enterprise applications.
- Software Group develops and supports student and information management systems and the tools to manage business, human resources, payroll, school, and student level data such as Business Tools for Schools (BTS) and Integrated Student Information Systems (ISIS).
- Shared Services & Operations provides services in the following areas: data center operations, network operations, telecommunications, computer repair, security, helpdesk, and server and storage management.
- Capital Projects develops and designs the District's overall information technology infrastructure. Establishes and maintains technology-related standards and specifications. Manages all IT capital projects and other projects.

The keystone for success of the Education Technology Plan is the regular use and integration of technology by LAUSD teachers and staff. The District augments professional development and other training by providing continual resources to assist teachers, staff, and students with the myriad of issues that arise and continues to refine comprehensive plans for end-user support. Such support may include Help Desk, deploying site-based personnel for first line support, adapting and adopting the "coaching model", and bundling support service with the various District software providers as well as utilizing the Instructional Technology Application Facilitators (ITAFs) to design and support local district and site efforts to implement this Plan.

An additional layer of technical support and maintenance needed for the handling of issues transparent to the end-users but necessary to ensure reliable and resilient operations of the WAN, LAN, servers, phone systems, and telecommunications services is provided by the District.

Technical Support, both for instructional/administrative integration and the maintenance of technical resources, is one of the most critical factors for success of this or any technology plan. In response to the first need, the District currently has 18 Instructional Technology Applications Facilitators (ITAFs) and Specialists who are available to collaborate with the school community to discuss the development of site instructional technology planning efforts, the design and coordination of professional development, curriculum integration, and other issues related to technology support at both the school and local district levels. Site Technology Coordinators provide ongoing, day-to-day integration and support demanded by users in schools and administrative offices; thus, a growing percentage of school sites are choosing to release a certificated teacher for one, two or more periods a day and/or collaborate with academic coaches in reading, mathematics, designated science lead teachers and others to support the integration of technology into the school program. Successful professional practice areas of focus for such Technology Coordinators include: working with the site stakeholders to develop a site tech plan and/or applicable technology components within a Site Single Plan; coaching other teachers in effective classroom integration; overseeing technology integration efforts in the school's instructional program; collaborating with ITAFs to share best practices and develop resources.

The increase in technology use for teaching and learning has had the added effect of generating greater demand for school-based microcomputer support assistants for maintenance and routine trouble shooting. Some schools have implemented student technology teams to provide this level of technical support for teachers, while others have identified community resources, both online and contracted personnel, to assist in this effort, and still others have full or part time classified staff performing this function.

As of June 2008 an estimated 60% of the LAUSD school sites currently have or are considering an outsourced contract or a staff person on site (full or part time, classified or certificated), at an average of $40K budged annually among the above various models, to handle a portion of daily integration support and/or technical maintenance and trouble shooting.

In addition the Information Technology Division has an established IT Customer Support Desk that provides one central location for users to receive help on computer, network, or software issues. This Customer Support Desk has been successful to date, although the demand is increasingly exceeding capacity.

The IT Customer Services Branch has consolidated all IT support. An IT Customer Support Desk has been created and staffed. Customer Support calls are tracked through an "Implemented Enterprise Service Management System." Customer support service representatives have been hired to maintain ownership of reported problems and ensure the problem is resolved. Additional supplemental support services have been contracted to work in conjunction with Customer Support Desk personnel.

The goals in this Plan depend upon the appropriate use of and reliable operation of the technology deployed. To guarantee that all systems meet an adequate standard of reliability, LAUSD will continue to 1) extend warranties of technology hardware at purchase time; 2) develop Service Level Agreements (SLAs) with equipment providers; 3) develop a process for tracking warranty issues and expiration dates of those warranties; and 4) continue to provide IT Customer Support services as well as work with sites and local offices to build technology integration and technical expertise and collaboration among certificated and classified staff.

The District has chosen to support both Windows and Macintosh platforms, with minimum configurations set for the purchase of new systems. The District has formalized agreements with Apple, Dell, Hewlett-Packard, and Lenovo for hardware whereby all new equipment purchased through one of these vendors includes a 3-5 year service contract. LAUSD maintains District-wide high volume purchasing agreements and the attendant means for materials management and will explore applying these policies to other areas.

In addition to the technology resources of hardware, software, infrastructure, and support, the Information Technology Division believes that this Education Technology Plan can only be successful if attention is given to critical methodologies of policies, procedures, and planning. One of the most critical areas of concern for the District is Application Security. As the largest employer in the City of Los Angeles, it is critical to protect the confidential records of both the District employees and K-12 students. A substantial part of this need is to prevent identity theft and an equal need to meet governmental regulations for protection of information and students.

Policies and procedures need to be reviewed to ascertain the most efficient and effective means for salvaging and disposing of aged or replaced equipment. Many alternatives are available to the District such as trade-in, resale, or disbursement, which can and does reduce the overall cost for implementation of new solutions and increase the accessibility of technology to the community.

LAUSD uses technology protection measures to block or filter, to the extent practical, access of visual depictions that are deemed obscene, pornographic, and harmful to minors over the network. Other unacceptable uses include selling or purchasing illegal items or substances, spamming or spreading viruses, using profane or abusive language, or using any District computer to pursue "hacking" internal or external to the District. Schools must verify each year that students using the computer network and Internet access have a signed page acknowledging this policy as previously described in Section 3.

To be Acquired: The District will maintain its described 2008 levels of Technical Support.

5c. Benchmarks and timeline for obtaining the needed resources.

Hardware/Peripherals:

NOTE: Achieving the following equipment-purchase objectives or recommendations may be dependent on the acquisition of additional funding, including grants and state one-time moneys.

	OBJECTIVES & BENCHMARKS:	2009-2010	2010-2011	2011-2012
5c.1	By June 2011, the District-wide student to computer (<49 months old) ratio will be 6.9:1.*	7.5:1 (buy 25,000* computers)	7.3:1 (buy 22,000* computers)	6.9:1 (buy 20,000* computers)
5c.2	The District or sites will purchase peripherals (projection devices, probes, handheld computers, digital microscopes, interactive digital white boards, printers, multi-function devices, digital cameras, etc.) for about 515 classrooms annually.	Purchase peripherals for 175 sites, 3 classrooms per site	Purchase peripherals for 175 sites, 3 classrooms per site	Purchase peripherals for 175 sites, 3 classrooms per site

*See also prior notes in Section 5a related to the District's commitment to explore various mobile learning devices, e-textbooks, virtual desktop environments, blade computing, lease options etc. to create ubiquitous student technology access as appropriate to fully support the instructional mission of the District and meet the goals of this Education Technology Plan.

Electronic Learning Resources /Administrative Software:

NOTE: Achieving the following resource/software-purchase objectives and benchmarks recommendations may be dependent on additional funding, including grants and state one-time moneys.

	OBJECTIVES & BENCHMARKS:	2009-2010	2010-2011	2011-2012
5c.3	The sites will purchase software products, subscriptions and utilize available District online learning programs (OLP), as applicable to grade level and content areas, to meet instructional needs of Plan.	Purchase software/use OLP for 25,000 units plus upgrades	Purchase software/ use OLP for 22,000 units plus upgrades	Purchase software/ use OLP for 20,000 units plus upgrades
5c.4	The District will ensure all teachers have instructional network accounts.	70%	85%	100%
5c.5	The District will ensure all students have instructional network accounts.	50%	75%	100%

	OBJECTIVES & BENCHMARKS:	2009-2010	2010-2011	2011-2012
5c.6	IT Infrastructure project team will work with application vendors to refine data structure for all administrative software applications.	Complete secondary by 9/09	Complete 50% elementary	Complete 100% elementary
5c.7	Teachers and students will have access to technology resources accompanying adopted text series.	Gr K-12 Mathematics	Gr K-8 Reading/ Language Arts/ELD	Gr 9-12 Reading Language Arts/ELD; K-12 History/ Social Science
5c.8	The sites will obtain additional video-based distance learning services and opportunities as site resources and bandwidth become available.	Plan	Implement	Implement/ Assess
5c.9	All students will have access to assistive software as per their IEPs or 504 Plans (such as WebAnywhere software to allow the seeing impaired web surfing ability) as applicable.	Acquisition Plan TBD, w/ Special Ed	Acquisition Plan TBD, w/ Special Ed	Acquisition Plan TBD w/Special Ed

Telecommunications and Networking Infrastructure:

NOTE: Achieving the following telecommunications/networking-purchase objectives or recommendations may be dependent on additional funding, including grants and state one-time moneys.

	OBJECTIVES & BENCHMARKS:	2009-2010	2010-2011	2011-2012
5c.10	Initiate Converged solutions in classrooms	Explore Options to address 911	All classrooms access 911	Converged solutions deployed
5c.11	Replacing obsolete telephone equipment at 76 school sites.	Complete by June, 2010	N/A	N/A
5c.12	Upgrade software and equipment components for the existing telephone wiring at 9 sites remaining.	Complete by September, 2009	N/A	N/A
5c.13	Add MAN, as needed, to 150 schools.	50	50	50
5c.14	Add WLAN, as needed, to 315 schools.	105	105	105

	OBJECTIVES & BENCHMARKS:	2009-2010	2010-2011	2011-2012
5c.15	Provide LAN modernization to 516 schools.	173	90	53

Technical Support:

NOTE: Achieving Objective 5.19 below may be dependent on additional funding, including grants and state one-time monies.

	OBJECTIVES & BENCHMARKS:	2009-2010	2010-2011	2011-2012
5c.16	LAUSD will continue to extend warranties at the time of technology hardware purchases to 5 years with an onsite repair or replace policy within 48 hours to each school site.	Continue	Continue	Continue
5c.17	LAUSD will continue to develop Service Level Agreements (SLAs) with equipment providers to provide maximum support to each school site and District office.	Continue	Continue	Continue
5c.18	LAUSD will continue to track warranty issues and expiration dates of those warranties.	Continue	Continue	Continue
5c.19	LAUSD will maintain at least 2008 levels of technical support to end users.	Maintain	Maintain	Maintain

	Action Plan (for all 5c goals)	Timeline
a.	The Educational Technology Group and ITD will survey schools to determine current practices and identify potential pilots for using ubiquitous mobile learning devices, e-textbooks, virtual desktop systems, blade computing, creative lease options and other concepts to meet and sustain Plan goals and budget needs.	Pilots in 08-09 and 09-10 at all levels, with successful strategies spreading in 09-10 and after (ongoing, 2009-12)
b.	The Educational Technology Group and ITD will refine (and update annually) minimum configuration specifications for various instructional learning tools and peripherals to meet Plan goals.	Middle: 2010 Elem: 2011 HS: 2012

Action Plan (for all 5c goals)		Timeline
c.	The Educational Technology Group, local districts and Division of Instruction will assess pilot programs (by identifying best practices from IMaST pilots and during correlation/rubric development for 5th, 8th and 11th grade projects, and/or as part of District tactical Action Plan implementation) to determine the impact of various technologies on student achievement to meet Plan goals, particularly in the areas of improved language arts and mathematics achievement for sub groups identified in the LEA Plan; best practices will be showcased at InfoTech annually, and at other District venues, as applicable.	Ongoing, 2009-12; reports annually
d.	The District offices, local districts and sites will review and update procurement mechanisms to maximize budgets for the purpose of striving to meet Plan goals.	Report created annually
e.	The District offices, local districts and sites will, based on initiatives and available resources, purchase computers and peripherals, learning resources and administrative software, infrastructure, networking and technical support at the minimum configurations and in sufficient numbers to meet Plan goals.	Ongoing, 2009-12, funds permitting
f.	The Educational Technology Group (ETG) will work with local districts and sites to establish instructional network accounts for both teachers and students.	Annually, at beginning of school year and part of AUP process

5d. Monitoring Process

Monitoring Activity	Person Responsible	Schedule
Policies, purchasing agreements, warranty tracking, refined and carried out.	District ITD Directors (ETG/IT); Fiscal offices	Annual
Purchases of classroom, lab and library equipment carried out; inventory kept up to date; numbers and placement of computers reported on State Technology Survey by all sites.	Teachers (annual classroom inventory); site administrators; District ITD Directors (ETG/IT)	Purchase and inventory throughout the year; State Technology Survey in March
Site administrators kept informed of site equipment inventories in relationship to what is still needed to meet Technology Plan goals.	District ITD Director (ETG)	Assessment throughout the year; ordering per budget
Software/online services investigated, piloted, decided upon, purchased, implemented.	Site administrators; District ITD Directors, (ETG/IT)	Assessment throughout the year; ordering per budget

Monitoring Activity	Person Responsible	Schedule
Network and telecommunications upgrades planned and carried out as identified in Strategic Execution Plan	District ITD Director-I/T	Ongoing, 2009-12
Modernization and new construction carried out	Site administrators; District ITD Directors, (ETG/IT)	As per modernization schedule
Technical support efforts (both classroom integration and technical maintenance) monitored for consistent and timely response; expansion planned, carried out	Site administrators; District ITD Directors, (ETG/IT)	Assessment ongoing, 2009-12, throughout the year; hiring/contracting per budget
Review, synthesis and dissemination of results from surveys/showcases denoting best practices, promising pilots of emerging technologies as previously described in 5c Action Plan	Site administrators; local districts; Division of Instruction; District ITD Directors, (ETG/IT) and Technology Steering Committee	Assessment ongoing, 2009-12, throughout the year; reporting through Technology Steering Committee at minimum annually

6. FUNDING AND BUDGET COMPONENT

6a. Established and potential funding sources.

In 2006-07, hardware/electronic learning resources expenditures for Educational Technology between site and District purchases approximated $31,680,000 for hardware and $2,830,000 for ELRs. While there may be certain promising education technology-specific funding on the horizon (State K-12 Ed Tech Voucher monies and a potential increase in EETT/ATTAIN allocation recently tagged by Congress), the overall education cuts anticipated at the same time over the next three years due to the state budget crisis is expected to offset these potential increases, and thus the Plan's budget for hardware/ELR products during the Plan timeline is estimated at between $35 and $40 million per year. Likewise, District general fund expenses for telecommunications, network infrastructure and physical plant modifications are anticipated to be essentially "flat" for the Plan period, between $75 and $80 million per year, largely offset by E-Rate discounts. Technical Support, including technology integration specialists supporting professional and staff development and other certificated/classified staff available to schools are estimated at an additional $35 and $40 million. All technology objectives will be obtained through current and potential funding resources at Los Angeles Unified School District and sites. These include, but are not limited to:

District Level	Site Level
• *General Fund* • *Instructional Materials Fund* • *Categorical:* *Title II A* *Title II D* *Title III* *Title V (Innovative Programs)* *21st Century Learning Centers* *ASES* *GATE* *Professional Development Block Grant* *Adult Education* • *Facilities Budget:* *State construction funds* *Local G.O. bond* *Developer fees* *Redevelopment Revenue* • *E-Rate discounts and rebates* • *K-12 Ed Tech Voucher* • *Foundations/Donations* • *EETT Round 6 Grant* • *Grants* • *Community Based English Tutoring*	• *All categorical funds* • *Site budgets* • *Lottery* • *PTA/PTO* • *Local fund-raising efforts* • *Donations* • *ELAP (English Language Acquisition Program)* • *Grants* • *CAHSEE Intensive Instruction* • *Instructional Materials/Library Block Grant* • *School and Library Improvement Block Grant* • *QEIA* • *One-time block grants* • *Economic Impact Aid* • *Perkins (high school only)*

6b. Estimated annual implementation costs for the term of the plan.

The following chart breaks down estimated costs for the period of this Plan through 2012. **PLEASE NOTE: ALL FIGURES ARE ESTIMATES AND WILL ONLY BE SPENT ONCE FUNDING BECOMES AVAILABLE.**

	2009-2010	2010-2011	2011-2012	Potential Funding Sources
New Construction / Modernization / Retrofitting—Total Construction Costs--estimated				
MAN and LAN Modernization Projects	61,990,000	62,000,000	62,000,000	Bonds and General Funds, E-Rate
Computer Hardware and Peripherals				
Computer purchases to bring "up to date" Student to Computer ratio to 6:9 or better (*see notes in 5a re other potential models) @$1200 avg per unit, including warranty and productivity software—CHANGE BUDGET	37,500,000 for 25,000 computers*	33,000,000 for 22,000 computers*	30,000,000 for 20,000 computers*	Lottery, K-12 Ed Tech Voucher, Categorical, General Fund
Peripheral purchases for 3 classrooms per site (175 sites per year @ 3 per site, on a 5-yr cycle @$4,971 average per classroom	2,560,000 for 515 classrooms	2,560,000 for 515 classrooms	2,560,000 for 515 classrooms	Lottery, Categorical, General Fund
Electronic Learning Resources & Administrative Software				
ELRs and software/subscriptions for instruction @ $10.00 avg per student (projected enrollment)	6,780,000	6,733,000	6,733,000	Lottery, Categorical, General Fund
ISIS systems	900,000	900,000	900,000	General Fund
Oracle Licensing (includes ISIS, DSS, BTS Oracle database licensing)	900,000	900,000	900,000	General Fund
Periodic Assessment @ $7.62 per student (est. 617,000 student participation)	4,701,540	4,701,540	4,701,540	General Fund

Technology resources of adopted textbook series	TBD	TBD	TBD	IMR, Restricted Lottery
Software to accommodate students with disabilities	TBD	TBD	TBD	IDEA, other categorical, General Fund
Professional Development/Support				
ITAF and Specialists	12,000,000	12,000,000	12,000,000	EEET Formula, Foundations, General Fund
Online Courses, including staff (subs, extra duty)	2,000,000	2,000,000	2,000,000	Title II, EEET Formula, Foundations, General Fund
Academies, other training costs (such as programs, outside vendors, conferences)	1,000,000	1,000,000	1,000,000	Title II, EEET Formula, Foundations, General Fund
Local district PD, Site level coaches, staff	12,000,000	12,000,000	12,000,000	General, Fund, Title I, QUEIA, other categorical, EETT competitive
Technical Support & Maintenance				
IT System Maintenance Services	7,100,000	7,000,000	7,000,000	E-Rate, General Fund
Site level I/T staff	7,000,000	7,000,000	7,000,000	General Fund, Title I, QUEIA, other categorical
Network Management				
Websense Internet Filtering	310,000	310,000	310,000	General Fund
Symantic Antivirus (Corporate)	493,255	493,255	493,255	General Fund
Telecommunications (Voice/Data/Network)				
Telecommunications Services	19,500,000	20,000,000	20,000,000	E-Rate, General Fund
Internet Access	460,000	500,000	500,000	E-Rate, General Fund
Big 6 Desktop Monitoring Systems and other.	9,000,000	0	0	Grants, Ed Tech Voucher, General Fund

The following chart summarizes estimated yearly costs of plan implementation, taken from the charts shown above:

Year	Cost	Still TBD
09/10	$ 186,194,795	Technology resources of adopted textbook series. Software to accommodate students with disabilities.
10/11	$ 173,097,795	
11/12	$ 170,097,795	

6c. Obsolete equipment replacement policy.

As of the 2008 California School Technology Survey, over half of computers used for instruction in the District were more than four years old. Many will not run the latest versions of instructional software. In the period from 2008-12, finances permitting, the District and its schools have acquired or plan to purchase over 85,000 new computers, enough to replace all computers reported on the 2007 Survey as being more than two years old. Older computers which are still functional will be upgraded as needed/possible and repurposed to less demanding uses. Old stand-alone inkjet printers will be replaced by networked laser printers in classrooms. Other means of replacing, upgrading and or repurposing older computers will be investigated, as previously described in this Plan, as a part of the District's efforts to ensure timely access to appropriate technologies for all students in order to meet the instructional and professional development objectives of this Plan and the academic achievement goals of the District overall.

Obsolete equipment is defined as technology which is no longer operational and which cannot be repaired economically or which can no longer sustain useful software. Obsolete equipment is disposed of according to Board policy. The District complies with all E-Waste disposal regulations.

6d. Process for monitoring technology funding, implementation costs, and new funding opportunities and for adjusting budgets as necessary.

Individual(s) Responsible	Responsibilities	Reporting
Site Administrators	• Develop and monitor site budgets • Work with site based planning teams to determine technology needs and priorities • Budget to meet needs and priorities as appropriate • Originate purchase requisitions • Seek site funding opportunities as applicable (Perkins, etc)	• Report progress and needs as assessed • Submit recommended Plan changes as applicable

Individual(s) Responsible	Responsibilities	Reporting
Chief Technology Director/Director Educational Technology Group	• Approve education technology requests • Receive alerts on new ed tech funding opportunities from CTAP 11, other • Oversee District-Wide grant efforts for new ed tech funding	• Make quarterly report to Steering Committee • Report to CIO
Chief Technology Director, Capital Projects	• Oversee office responsible for District E-Rate program and rebates • Manage office providing financial support to capital projects • Monitor PC procurement staff's strategies to reduce PC costs	• Make quarterly report to Steering Committee • Report to CIO
Chief Information Officer	• Oversee all District technology budgets, including Education Technology Plan • Seek partnerships to leverage budget, support District initiatives	• Report to Board
Budget Services and Financial Planning	• Oversee and approves bid and contract processes • Seek best value/price for District • Advise budget adjustments as needed	• Report to Board
Budget Services and Financial Planning; School Fiscal Services Division	• Carry out budget and code check • Perform interim reporting • Perform budget and expense review • Receive new funding alerts and apprise schools, divisions accordingly	• Report to Board

7. MONITORING AND EVALUATION COMPONENT

7a. Process for evaluating the plan's overall progress and impact on teaching and learning.

The LAUSD Chief Technology Director, Educational Technology Group, supported by his Educational Technology Group staff, is formally responsible for updating this Education Technology Plan.

A District Technology Steering Committee, formed in fall 2008, will monitor the implementation of this Education Technology Plan, planning mid-course corrections, considering new technology opportunities, and making recommendations for Plan updates.

Facilitated by the Chief Technology Director and Director, Educational Technology Group, the Steering Committee consists of Director-level staff from these District units: Chief Information Officer's office, Elementary Instruction, Secondary Instruction, Instructional Support Services, Student Integration Services (includes Parent Services), Design Schools (includes Language Acquisition and English Learners, Beyond the Bell), Budget Services and Financial Planning Division, and Facilities. Representatives of the Division of Adult and Career Education, Assessment and Student Data, and School Management Services units and the Local Districts will attend meetings as needed. Input from and relevant output to the offices Civic Engagement, General Counsel, Communications, Superintendent of Schools and Board of Education will be included as applicable.

At its quarterly meetings, the Technology Steering Committee will examine both monitoring (formative evaluation) data and summative evaluation data measuring progress on meeting Plan objectives and benchmarks. Monitoring strategies address questions such as:

- Were tasks completed as designed? Were implementation timelines met? If not, why?
- What barriers were encountered during implementation? How were they addressed?
- What baseline data is needed for future summative evaluations?
- What changes were implemented? Why? To what effect?
- What are the implications of any mid-course corrections for redesign?

In addition, the Committee will discuss new technologies that may have become available and new strategies that have been suggested, and will consider what new student and staff needs may have emerged that should be addressed with additional/different goals. They will then make recommendations for updates to the Education Technology Plan as needed. Annual Plan updates will be coordinated with E-Rate cycles and applications. A supplemental budgetary analysis will be completed annually as needed.

Details on the evaluation processes for each set of goals and benchmarks, including persons responsible, are included in the Monitoring, Evaluation, and Program Modification Process charts of each goal in Sections 3d-3j (Curriculum), in Section 4c (Professional Development), in Section 5d (Hardware, Electronic Learning Resources/Administrative Software, Infrastructure, and Technical Support), and in Section 6d (Funding and Budget).

7b. Schedule for evaluating the effect of plan implementation.

This information is described in the Monitoring, Evaluation, and Program Modification Process charts of each goal in Sections 3d-3j; in Section 4d; in Section 5d; and in the Action Plans (including timelines) of Section 5.

The following chart shows the schedule for meetings and assessment measures that will be used in the evaluation of overall Education Technology Plan implementation:

Forum/Measure	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
LAUSD Technology Steering Committee					X							X
Technology Assessment Profile		X	X	X								
EdTechProfile Student Survey (gr. 5, 8, 11)										X	X	X
California Standards Tests		X	X	X					X	X	X	
Graduation rate		X	X	X								
Data on teacher use of ISIS for attendance and grading (report)	X											
Periodic Assessments online access reports	X							X				
Records of parent online access to student information										X	X	
Report/analysis of Learning Zone and other PD records				X			X				X	
State Technology Survey								X	X			

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LAUSD Roles	Responsibilities and Participation
Students	• Improve academically and graduate from high school • Increase technology competencies • Use technology resources to improve learning • Complete surveys and projects
Teachers	• Use technology resources to improve instruction • Participate in professional development activities • Complete surveys and self-assessments • Assess student technology competencies • Enter progress data into ISIS and review Periodic Assessment data • Mentor peers
Site Technology Coordinators	• Document issues/problems/needs • Demonstrate model classroom lessons using technology • Facilitate sustained teacher professional development including 1:1 • Mentor teachers
Site Administrators	• Facilitate site vision, plan • Allocate resources • Facilitate professional development opportunities • Periodically monitor teacher progress
Local Districts	• Facilitate local district vision, plan • Allocate resources • Facilitate professional development opportunities • Periodically monitor site progress
ITAFs	• Collaborate with school community to discuss needs, review data • Assist in the development of site instructional technology use plans • Assist in design and delivery of specific professional development • Collaborate with Site Technology Coordinators to share practices
District Directors	• Ensure appropriate planning, policies to implement Plan • Collaborate on implementation strategies and assessment practices • Provide professional development and other support mechanisms
District Education Technology Plan Steering Committee	• Monitor project plans and timelines • Document issues/problems • Review aggregated progress and impact data • Recommend strategies for solving issues • Review and report status on the Plan semi-annually

LAUSD will maintain all monitoring and evaluative information. Strategies for collecting information include periodic progress reviews, surveys (online, phone, hardcopy), interviews, focus groups, observation/demonstration, and examination of student records. Data will be compiled by the Educational Technology Group and archived once the evaluation process is complete.

7c. Process and frequency of communicating evaluation results to technology plan stakeholders.

The LAUSD Education Technology Plan Steering Committee will use a variety of means to disseminate evaluation results to all stakeholder groups including schools, parent groups, community organizations, etc. An Education Technology Plan public relations overview will be integrated into the District Communication Office planning to reach a maximum number of stakeholders. A variety of methods will be employed including:

- Press releases: as applicable (e.g., announcements of ed tech grants awarded, etc.)
- InfoTech Conference: annually
- District's TV station (KLCS): semi-annually
- Newsletters: semi-annually
- Electronic Town Hall meetings: quarterly
- Other community meetings (e.g., Education Technology Alliance-Los Angeles): quarterly
- Posting on the District and school websites and District e-mail: weekly, or as needed

8. EFFECTIVE COLLABORATIVE STRATEGIES WITH ADULT LITERACY PROVIDERS TO MAXIMIZE THE USE OF TECHNOLOGY

LAUSD understands that adult literacy is a key component to improving the educational potential of its students. The 2000 US Census data reveals the following information about the residents of the City of Los Angeles and Los Angeles County.

City of Los Angeles Total Population:	3,694,820
Social characteristics:	
Population 25 years or older	2,308,887
High school graduate or higher	66.6%
Bachelor's degree of higher	25.5%
Speak language other than English at home (5 yrs or older)	57.8%
Economic characteristics:	
In labor force (16 years or older)	60%
Families below poverty level	18.3%
Individuals below poverty level	22.1%

County of Los Angeles Total Population	9,519,338
Social characteristics:	
Population 25 years old or more	5,882,948
High school or higher degree	69.9%
Bachelor's degree or higher	24.9%
Speak language other than English (5 yrs or older)	54.1%
Economic characteristics:	
In labor force (16 years or older)	63.9%
Families below poverty level	14.4%
Individuals below poverty level	17.9%
Ethnicity/Race:	
White	48.7%
Black or African American	9.8%
American Indian and Alaska Native	0.8%
Asian	11.9%
Native Hawaiian/Other Pacific Islander	0.3%
Some other race	23.5%
Hispanic or Latino (of any race)	44.6%

A District this large with such a broad economically and socially diverse population faces enormous challenges to improving the literacy of its adult population. How the District looks to service providers outside the District and with whom they collaborate is described below.

The LAUSD administers to almost 694,000 K-12 students who come from a broad range of racial/ethnic social backgrounds in a geographic area encompassing almost 710 square miles. To prepare its students to function in an English-speaking environment, the District addresses the needs of its almost 315,500 English learners (EL) separately from the English-speaking students.

The parents of these EL students speak Spanish, Armenian, Cantonese, Korean, Farsi, Filipino, Russian, Vietnamese and more than 70 other languages. The literacy of these non-English speaking community members is important to the District in that their literacy helps foster the literacy of their children.

Presently, LAUSD has 28 Community Adult Education Centers. These Centers, spread throughout the District, help address the community's literacy and learning needs and serve almost 138,000 adults. Other providers of educational services to Los Angeles residents include institutions of higher education, city departments, public libraries, and private educational service organizations.

Many parents and community members do not have access to technology resources at home, so they need to have local community access to technology equipment along with computer classes and access to college and instructional materials. These resources allow them to advance and provide their children with better opportunities. Currently, community centers, the public library system, and some colleges and universities in the County provide the majority of these educational technology services.

Residents with Internet access can explore a broad range of educational services via links from the District's website (http://www.lausd.net). Also, the City of Los Angeles website (http://www.lacity.org/lacity4.htm), including resources related to education, health, and Safety for students, teachers, and parents such as:

- LA's BEST Online for after school education, recreation and enrichment programs
- LA Department of Water and Power (LADWP) educational services including the formation of educational partnerships with the schools
- LA Department of Recreation and Parks Kids Zone and Classparks
- LA Police Department (LAPD) Youth Program
- LA Public Library Kid's Path
- Links to colleges and universities in the County, including USC, UCLA and UC Northridge, LA City College, Coast Community College, Loyola Marymount University, for information about adult education and higher education programs

LAUSD will maintain and further develop a comprehensive adult literacy/outreach program for community members interested in furthering their education and enhancing their skills. This program includes continuing to develop successful after school, extended day, and beyond the school walls strategies/programs that make technology resources available to parents and students in environments that are both safe and secure. In addition, workshops and courses on technology tools (computers, digital cameras, scanners) and applications for interested community members will continue to be made available. Beyond workshops and courses, information will be publicized about online learning opportunities for all learners that are available beyond the school day.

LAUSD seeks to educate parents and students on the value of integrating technology tools and resources into school and home learning environments. This thinking requires a variety of public information and community awareness and involvement activities to paint the vision of 21st Century learning, such as the annual InfoTech conference for showcasing classroom use of technology, and the Computer for Youth (http://www.cfy.org) program, which provides access to technology in the home for student and parent learning. Town Hall Meetings, in-person and via videoconference, would allow many parents and community members to learn about and discuss school issues. Additionally the District will maximize the potential of the LAUSDnet website and individual school websites.

9. EFFECTIVE, RESEARCH-BASED METHODS AND STRATEGIES

9a. Summary of relevant research which supports curricular and professional development goals.

The following annotated bibliography describes the research that was used in the preparation of this plan and how the District has used and will use the research findings in the development and implementation of the plan. The research was selected for its focus on strategies and methods to integrate technology in order to improve learning, teaching, and management.

Research and Models/Strategies Literature:

CEO Forum (2001). The CEO Forum School Technology and Readiness Report: Key Building Blocks for Student Achievement in the 21st Century. http://www.ceoforum.org/downloads/report4.pdf.

This report concludes that effective uses of technology to enhance student achievement are based on four elements: alignment to curricular standards and objectives, assessment that accurately and completely reflects the full range of academic and performance skills, holding schools and districts accountable for continuous evaluation and improvement strategies, and an equity of access across geographic, cultural, and socio-economic boundaries. State, district, and site policies, programs, and resources must be consistently aligned to meet educational objectives. Technology transforms the learning environment so that it is student-centered, problem and project centered, collaborative, communicative, customized, and productive. Students must acquire 21st century skills in order to thrive in the new knowledge-based economy, including technological and information literacy, inventive thinking, effective communication and high productivity skills

The Los Angeles Unified School District and each school maintain strict alignment of instruction with state content standards through long-range planning and curriculum Instructional Guides. The Technology Plan bases all instruction on state content standards. Software is chosen to align with state standards. Student achievement is monitored through standards-based Periodic Assessments. Through ongoing data collection and analysis, the District will continuously monitor its attainment of the goals and objectives of the Technology Plan, and will report results annually to the superintendent, the Board of Education, and the public. Throughout the Plan, attention is paid to providing equitable access to all students in the community, including students in special populations. The District will implement a plan for staff training and instruction of students in information literacy.

Williams, T., Kirst, M., Haertel, E., et. al. (2005). Similar Students, Different Results: Why Do Some Schools Do Better? A large-scale survey of California elementary schools serving low-income students. Mountain View, CA: EdSource. http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/1b/d3/8c/pdf

This study examined 257 California elementary schools with similar student populations (high percentages of low income students and English Learners) to determine which educational practices are most strongly associated with higher levels of student achievement (using 2005 API

results). The four practices most highly correlated with higher API scores were implementing a coherent, standards-based instructional program (including use of pacing schedules); ensuring availability of instructional resources (up-to-date materials and supplementary instruction for struggling students); using assessment data to improve student achievement and instruction; and prioritizing student achievement.

LAUSD will integrate technology use with all four of the highest ranked practices, including use of state-approved/adopted software and correlating software and technology/ information literacy skills with District Instructional Guides; increasing student access to technology, including web-based curriculum programs and online learning systems, streaming media, videoconferencing, and instructional programs for struggling students; emphasizing the automation of student assessment and data reporting and analysis; and evaluating the entire technology program based on student achievement.

CEO Forum (2000). The CEO Forum School Technology and Readiness Report. The Power of Digital Learning: Integrating Digital Content. http://www.ceoforum.org/downloads/report3.pdf

This report offers a vision for digital learning and focuses on actions that schools, teachers, students, and parents must take to integrate digital content into the curriculum to create the learning environments that develop 21st century skills. The power of digital learning is discussed, including the need for digital learning, reasons why digital content is essential, shifting to digital learning environments, models from the business community, readjustment (expanding the scope of technology integration), the critical importance of professional development, and integrating digital content.

Consistent with this research, in the development of this plan, LAUSD has followed, and will continue to follow, the steps recommended in the report. In alignment with the report, the District has identified educational goals and linked technology resources to those objectives; established student outcomes and performance standards that will be achieved by the inclusion of technological resources; and determined a process for measurement and evaluation of the outcomes and modification of the plan accordingly.

The Conference Board, Corporate Voices for Working Families, Partnership for 21st Century Skills & Society for Human Resource Management. (2006). Are They Really Ready to Work? Employers' Perspectives on the Basic Knowledge and Applied Skills of New Entrants to the 21st Century U.S. Work Force. http://www.21stcenturyskills.org/documents/FINAL_REPORT_PDF09-29-06.pdf.

While the “three Rs” are still fundamental to any new workforce entrant’s ability to do the job, employers emphasize that applied skills are “very important” to success at work. Applied skills that employers most value include professionalism/work ethic, oral and written communications, teamwork/collaboration, and critical thinking/problem-solving—which they often find lacking in entry-level employees. The results of this study leave little doubt that improvements are needed in the readiness of new workforce entrants, if “excellence” is the standard for global competitiveness.

In accordance with this report, LAUSD will develop and implement structures and strategies for teaching students technology and information literacy skills that will assist with their

development of the applied skills most valued by employers. Student use of technology, particularly productivity software, will focus on research/use of information, collaboration, communication, and higher order thinking skills. By the end of the Plan period, all students will have District network/email accounts.

Wenglinsky, Harold (1998). "Does It Compute? The Relationship Between Education Technology and Student Achievement in Mathematics." Educational Testing Service. http://ftp.ets.org/pub/res/technolog.pdf.

This article reports the findings from a national study of the relationship between different uses of educational technology and various educational outcomes. Data was drawn from the 1996 NAEP test in mathematics. The study concluded that, when they are properly used, computers may serve as important tools for improving student proficiency in mathematics, as well as the overall learning environment in the school. For eighth graders, teachers' professional development in technology and the use of computers to teach higher-order thinking skills were both positively related to student achievement in math.

Consistent with this research, LAUSD holds improving student work in mathematics as a major goal of its Technology Plan. Students will have access both during school and via Beyond the Bell and other intervention programs to software such as Carnegie, Compass, Kaplan, Explore Learning's Gizmos, concept mapping tools, and productivity programs (such as Excel for calculating and graphing) in order to improve their achievement in mathematics.

Yancey, Kathleen Blake (2004). "Using Multiple Technologies to Teach Writing." Educational Leadership. October 2004: 38-40.

Writers now use digital technologies to write many new kinds of text, such as Web logs, hypertexts, and electronic portfolios. Helping writers develop fluency and competence in a variety of technologies is a key part of teaching writing in this century. Students need to learn to comfortably use and combine print, spoken, visual, and digital processes in composing a piece of writing.

Under this Technology Plan, students will use computers (including mobile laptop labs), online resources (such as streaming media, reference databases, and podcasts), analog and digital recording equipment, and projection devices to plan, develop, and present standards-based projects in core and additional subject areas. Students will share ideas and knowledge using tools and forums such podcasts, videoconferencing, email, monitored discussion boards, student response systems, conferences, symposia, and competitions, and new, emerging technologies.

Valdez, G., McNabb, M., et. al. (2000). Computer-Based Technology and Learning: Evolving Uses and Expectations. North Central Regional Educational Laboratory. http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/19/37/4b.pdf

This research report takes an in-depth look at the three distinct phases of technology uses and expectations: Print Automation, Expansion of Learning Opportunities, and Data-Driven Virtual Learning. For each it addresses two important and highly interrelated questions facing educators as they try to determine the best use of technology in K-12 settings: (1) What evidence is there that the use of computer-based technology in each phase has a positive effect on learning; and (2) What significance do the findings from each phase have for educators today as they try to make technology-related decisions that have an impact on student learning?

Consistent with this research, and following the recommendations made in the report, LAUSD has designed and will continue to implement a plan that provides an opportunity for technology to make learning more interactive (using devices such as interactive whiteboards and classroom response systems and tools such as online simulations and videoconferencing); individualize and customize the curriculum to match learners' developmental needs as well as personal interests (using instructional programs such as those provided by Carnegie Learning and Apex and online classes of individual interest); capture and store data for informing data-driven decision making (through Periodic Assessments/Princeton Review and ISIS); enhance avenues for collaboration among family members and the school community (using Connect-ED and a parent/student portal to provide access to student assignments and grades); and improve methods of accountability and reporting.

Rice, Kerry Lynn (2006). "A Comprehensive Look at Distance Education in the K-12 Context." Journal of Research on Technology in Education, 38(4), 425-448. http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/2b/5e/9c.pdf

This review provides a comprehensive examination of the literature surrounding the current state of K-12 distance education. The National Education Technology Plan proposes support for e-learning and virtual schools as a way to assist schools in implementing systematic change. Research has shown that learning in a well-designed distance education environment is equivalent to learning in a well-designed classroom. Distance education programs can serve entire populations of students that traditional classrooms do not, including students who need flexible schedules or who wish to move at their own pace, enrich their education, or use their individual learning styles. Researchers report that students appreciate the feeling of empowerment and freedom in the direction of their learning provided in distance-learning situations. In addition, distance learning tends to provide increased access to highly qualified teachers and more individual support for students from their teachers. The characteristics identified as successful with at-risk students—instructional environments that are self-paced, personalized, utilize diverse instructional methods, and are facilitated by competent, caring adults—are characteristics of distance education often cited by proponents.

A major focus of this Technology Plan will be increased access to, and use of, both formally and less-formally structured means of distance learning. Online learning services such as Apex Learning, the Community College Collaborative, and LAUSD-developed programs will be utilized for purposes such as credit recovery; CAHSEE preparation, meeting A-G requirements, Advanced Placement courses, GATE, and English learner needs in order to increase the District's graduation rate and support/complement traditional classroom efforts to improve academic achievement. Technologies such as streaming media, videoconferencing, and podcasts will bring remote resources into instructional classrooms.

Todd, Ross J., Carol C. Kuhlthau, and OELMA (2004). Students Learning through Ohio School Libraries. Columbus, OH: Ohio Educational Library Media Association. http://www.oelma.org/studentlearning/default.asp

This study shows that an effective school library, led by a Teacher Librarian with a clearly defined role in information-centered instruction, greatly facilitates student learning. There are three interactive components in the library's role as a dynamic agent of learning: Informational (resources and technology infrastructure), Transformational (instructional interventions), and Formational (student outcomes). The Informational component requires resources in a variety of formats and state-of-the-art technology for access to and use of information. The Transformational component includes the development of information and technological literacies, including critical thinking, communication skills, and ethical behavior. The Formational component includes knowledge production (students using technology tools to produce new knowledge and demonstrate achievement) and knowledge dissemination (communicating ideas using many modes of expression).

LAUSD will continue to provide its school libraries with the necessary technology to continue their instructional role. District Teacher Librarians will be central in information literacy skills instruction, through development of alignments between identified skills and current grade/content project requirements and Instructional Guide content standards, collaboration with classroom teachers at school sites, and direct instruction of students.

Connecting the Bits. A Reference for Using Technology in Teaching and Learning in K-12 Schools. (2000). The National Foundation for the Improvement of Education. http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/19/26/e1.pdf

This book provides information for integrating technology into teaching and learning in K-12 schools, based upon findings from two past programs of the National Foundation for the Improvement of Education. "The Road Ahead" program explored how technology can facilitate teaching and learning in both formal and informal education settings, and the "Learning Tomorrow" program funded pilot projects that investigated how technology can improve teaching and learning for underserved students.

As recommended throughout this document, LAUSD has focused its attention first on establishing learning goals for students in alignment with the District's Local Education Agency Plan. The emphasis of the Technology Plan is to help teachers become comfortable and highly competent in the integration of technology throughout the curricula. Integral to the Plan, and supported by this research and others, is the belief that successful integration of technology depends on teachers who are knowledgeable, have opportunities for continuous learning, and who challenge their students academically while providing the support necessary to ensure their success. The professional development programs at LAUSD have been designed to incorporate these concepts.

Designs for Learning: An Introduction to High Quality Professional Development for Teachers. The California Department of Education.

This document provides the framework for designing high quality professional development. It is based on three guiding principles: (1) High quality professional development helps teachers to more ably address the learning needs of every student, thereby improving the learning of all students; (2) High quality professional development designs will vary in accordance with the different phases of a teacher's development; and (3) Administrators who are actively involved in their own learning are better able to create and support conditions that result in high levels of teacher competency and student achievement.

LAUSD has designed a professional development program consistent with the recommendations made in this document. The professional development programs address the needs of professionals at their respective levels. The training of administrators is also addressed. All professional development activities will be monitored, evaluated and modified, as described in the Plan.

Ringstaff, Cathy; Kelley, Loretta (2002). The Learning Return on Our Educational Technology Investment. A review of findings from research. West Ed. http://www.wested.org/online_pubs/learning_return.pdf.

This paper summarizes major research findings related to educational technology use and draws out implications for how to make the most of technology resources, focusing on pedagogical and policy issues. The distinctions between learning "from" computers and learning "with" computers are delineated. The findings of the research focus on adequate and appropriate teacher training; changing teacher beliefs about learning and teaching; sufficient and accessible equipment, including adequate computer-to-student ratio; long-term planning; and technical and instructional support.

Consistent with this research, LAUSD's Technology Plan has been designed to address the benefits and rationale for both learning "from" technology (i.e., using computers to assist students in learning skills, etc.) and learning "with" technology (i.e., using technology to assist students with projects and other higher order thinking skills lessons). The Plan also addresses sufficient and accessible equipment, especially as it relates to student-to-computer ratios, and technical and instructional support. Long-term planning and monitoring are built into the Plan.

Strudler, Neal B. (1994). The Role of School-Based Technology Coordinators As Change Agents in Elementary School Programs: A Follow-up Study. Presented at AERA, New Orleans, LA, April 5, 1994. http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01 /0000019b/80/13/c9/e4.pdf

There is a continuing need for the school site presence of a technology coordinator who can serve as a mentor or "translator" of technology applications and instructional integration for teachers. Appropriate technology resource personnel are not only for the early stages of a technology initiative or technology plan.

This Technology Plan addresses deploying site-based personnel for first line support, adapting and adopting the "Coaching Model," bundling support service with the various District software providers, and deploying Instructional Technology Application Facilitators to design and support site efforts to implement this Plan. District academic coaches will continue to be trained to use appropriate technology resources and to support teachers in their subject areas in successful technology curriculum integration. It is estimated that about 60% of District schools currently

have or are considering an outsourced contract or staff person on site (full or part time, classified or certificated) to handle a portion of daily technical and/or integration support.

9b. Description of plans to use technology to extend or supplement the District's curriculum with rigorous academic courses and curricula, including distance-learning technologies.

Los Angeles Unified School District will offer learners many, varied opportunities to use technology to access rigorous academic courses and content, so that students will graduate college-prepared and career-ready.

Increasing the use of distance education is a major focus of this technology plan. Formal distance education can be defined as institution-based education where the students are not in one place, in which some form of interactive telecommunication is used to connect learners, resources, and teachers. The Los Angeles Unified Online Learning Programs provide students access to high-quality, standards-based, content-driven learning experiences that meet their learning needs and expand the boundaries of the classroom. Current online offerings as of Fall 2008 include: Advanced Placement (AP) courses available to students at any high school; selected A-G courses in a blended (online combined with face-to-face) learning environment; and supplemental online course material and virtual learning spaces (Moodle) for teachers and students to expand learning opportunities beyond the traditional classroom.

Over the next three years, access to and participation in 24/7 online learning services such as Apex Learning and the Community College Collaborative as well as LAUSD internally procured/developed online learning program content will increase substantially to meet specific learning needs of individual middle and high school students in areas such as A-G requirements, Advanced Placement courses, GATE enrichment, and English language development.

Increased use of technology to facilitate other types of distance-learning opportunities to extend the curriculum will also be a focus of this technology plan, including access to online content-oriented instructional programs, streaming media services, videoconferencing, podcasts, and online reference materials.

LAUSD and/or individual schools will provide web-based subscriptions to CBE/CLRN-approved programs such as Carnegie, Compass, Kaplan, Explore Learning's Gizmos (Mathematics; Science), and Vantage Learning's MY Access (Writing), many of which provide individualized instructional support for all levels of learners, including advanced students.

Teachers and students will increasingly use streaming media services/resources such as California Streaming, Discovery Education streaming, The Futures Channel, and media resources associated with adopted textbook series for instruction, demonstrations, presentations, and projects.

Teachers and students at all grade levels will increasingly utilize videoconferencing to connect classrooms with outside experiential learning opportunities such as NASA Explorer, MOCA, ACME Animation Project, and PORTS.

The "i-Tunes LAUSD" project will have the potential to expand student learning opportunities and deliver 24/7 access to outward-facing educational content from hundreds of top colleges,

universities, and educationally focused organizations across the country, as well as inward-facing LAUSD created content.

LAUSD students and teachers will continue to have 24/7 access to online subscription databases such as Britannica, World Book, Grolier reference sets, and ABC-CLIO, a broad online collection of history encyclopedias, handbooks, dictionaries, and guides.

So that they may utilize all these resources as well as email and class website postings, students in grades 3-12 who do not already have such access will be provided with a District lausd.net account.

In addition, LAUSD students will increasingly participate in national, state, and local symposia, conferences, programs, and competitions in order to develop and demonstrate their attainment of academic content proficiency in science, mathematics, and language arts as well as information/technology knowledge and skills. Examples include local, state, and national Academic Decathlon and Robotics Competitions; county initiatives such as Digital Voice and Future Cities; and District programs such as the annual InfoTech Conference.

Appendix C – Criteria for EETT Funded Technology Plans

In order to be approved, a technology plan needs to have "Adequately Addressed" each of the following criteria:

- For corresponding EETT Requirements, see the EETT Technology Plan Requirement (Appendix D).
- Include this form (Appendix C) with "Page in District Plan" completed at the end of your technology plan.

1. **PLAN DURATION CRITERION**	**Page in District Plan**	**Example of Adequately Addressed**	**Example of Not Adequately Addressed**
The plan should guide the district's use of education technology for the next three to five years. (For a new plan, can include technology plan development in the first year)	**6**	The technology plan describes the districts use of education technology for the next three to five years. (For new plan, description of technology plan development in the first year is acceptable). Specific start and end dates are recorded (7/1/xx to 6/30/xx).	The plan is less than three years or more than five years in length. Plan duration is 2008-11.
2. **STAKEHOLDERS CRITERION** **Corresponding EETT Requirement(s): 7 and 11 (Appendix D).**	**Page in District Plan**	**Example of Adequately Addressed**	**Not Adequately Addressed**
Description of how a variety of stakeholders from within the school district and the community-at-large participated in the planning process.	**6-7**	The planning team consisted of representatives who will implement the plan. If a variety of stakeholders did not assist with the development of the plan, a description of why they were not involved is included.	Little evidence is included that shows that the district actively sought participation from a variety of stakeholders.

3. **CURRICULUM COMPONENT CRITERIA** Corresponding EETT Requirement(s): 1, 2, 3, 8, 10, and 12 (Appendix D).	**Page in District Plan**	**Example of Adequately Addressed**	**Example of Not Adequately Addressed**
a. Description of teachers' and students' current access to technology tools both during the school day and outside of school hours.	**8-9**	The plan describes the technology access available in the classrooms, library/media centers, or labs for all students and teachers.	The plan explains technology access in terms of a student-to-computer ratio, but does not explain where access is available, who has access, and when various students and teachers can use the technology.
b. Description of the district's current use of hardware and software to support teaching and learning.	**9-18**	The plan describes the typical frequency and type of use (technology skills/information literacy/integrated into the curriculum).	The plan cites district policy regarding use of technology, but provides no information about its actual use.
c. Summary of the district's curricular goals that are supported by this tech plan.	**18-20**	The plan summarizes the district's curricular goals that are supported by the plan and referenced in district document(s).	The plan does not summarize district curricular goals.
d. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan for using technology to improve teaching and learning by supporting the district curricular goals.	**20-30**	The plan delineates clear goals, measurable objectives, annual benchmarks, and a clear implementation plan for using technology to support the district's curriculum goals and academic content standards to improve learning.	The plan suggests how technology will be used, but is not specific enough to know what action needs to be taken to accomplish the goals.

e. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan detailing how and when students will acquire the technology skills and information literacy skills needed to succeed in the classroom and the workplace.	**30-38**	The plan delineates clear goal(s), measurable objective(s), annual benchmarks, and an implementation plan detailing how and when students will acquire technology skills and information literacy skills.	The plan suggests how students will acquire technology skills, but is not specific enough to determine what action needs to be taken to accomplish the goals.
f. List of goals and an implementation plan that describe how the district will address the appropriate and ethical use of information technology in the classroom so that students can distinguish lawful from unlawful uses of copyrighted works, including the following topics: the concept and purpose of both copyright and fair use; distinguishing lawful from unlawful downloading and peer-to-peer file sharing; and avoiding plagiarism (AB 307, optional in 2007-08 tech plan, required in all tech plans 2008-09 and after)	**38-41**	The plan describes or delineates clear goals outlining how students will learn about the concept, purpose, and significance of the ethical use of information technology including copyright, fair use, plagiarism and the implications of illegal file sharing and/or downloading (as stated in AB 307).	The plan suggests that students will be educated in the ethical use of the Internet, but is not specific enough to determine what actions will be taken to accomplish the goals.

g. List of goals and an implementation plan that describe how the district will address Internet safety, including how to protect online privacy and avoid online predators. (AB 307, optional in 2007-08 tech plan, required in all tech plans 2008-09 and after)	**38-41**	The plan describes or delineates clear goals outlining how students will be educated about Internet safety (as stated in AB 307).	The plan suggests Internet safety education but is not specific enough to determine what actions will be taken to accomplish the goals.
h. Description of or goals about the district policy or practices that ensure equitable technology access for all students.	**41-42**	The plan describes the policy or delineates clear goals and measurable objectives about the policy or practices that ensure equitable technology access for all students. The policy or practices clearly support accomplishing the plan's goals.	The plan does not describe policies or goals that result in equitable technology access for all students. Suggests how technology will be used, but is not specific enough to know what action needs to be taken to accomplish the goals.
i. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan to use technology to make student record keeping and assessment more efficient and supportive of teachers' efforts to meet individual student academic needs.	**43-47**	The plan delineates clear goal(s), measurable objective(s), annual benchmarks, and an implementation plan for using technology to support the district's student record-keeping and assessment efforts.	The plan suggests how technology will be used, but is not specific enough to know what action needs to be taken to accomplish the goals.
j. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan to use technology to improve two-way communication between home and school.	**47-51**	The plan delineates clear goal(s), measurable objective(s), annual benchmarks, and an implementation plan for using technology to improve two-way communication between home and school.	The plan suggests how technology will be used, but is not specific enough to know what action needs to be taken to accomplish the goals.

k. Describe the process that will be used to monitor the Curricular Component (Section 3d-3j) goals, objectives, benchmarks, and planned implementation activities including roles and responsibilities.	**51**	The monitoring process, roles, and responsibilities are described in sufficient detail.	The monitoring process either is absent, or lacks detail regarding procedures, roles, and responsibilities.

4. **PROFESSIONAL DEVELOPMENT COMPONENT CRITERIA** Corresponding EETT Requirement(s): 5 and 12 (Appendix D).	**Page in District Plan**	**Example of Adequately Addressed**	**Example of Not Adequately Addressed**
a. **Summary of the teachers' and administrators' current technology proficiency and integration skills and needs for professional development**.	**52-56**	The plan provides a clear summary of the teachers' and administrators' current technology proficiency and integration skills and needs for professional development. The findings are summarized in the plan by discrete skills that include CTC Standard 9 and 16 proficiencies.	Description of current level of staff expertise is too general or relates only to a limited segment of the district's teachers and administrators in the focus areas or does not relate to the focus areas, i.e., only the fourth grade teachers when grades four to eight are the focus grade levels.
b. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan for providing professional development opportunities based on your district needs assessment data (4a) and the Curriculum Component objectives (Sections 3d through 3j) of the plan.	**56-63**	The plan delineates clear goal(s), measurable objective(s), annual benchmarks, and an implementation plan for providing teachers and administrators with sustained, ongoing professional development necessary to reach the Curriculum Component objectives (sections 3d through 3j) of the plan.	The plan speaks only generally of professional development and is not specific enough to ensure that teachers and administrators will have the necessary training to implement the Curriculum Component.
c. Describe the process that will be used to monitor the Professional Development (Section 4b) goals, objectives, benchmarks, and planned implementation activities including roles and responsibilities.	**63-64**	The monitoring process, roles, and responsibilities are described in sufficient detail.	The monitoring process either is absent, or lacks detail regarding who is responsible and what is expected.

5. **INFRASTRUCTURE, HARDWARE, TECHNICAL SUPPORT, AND SOFTWARE COMPONENT CRITERIA** Corresponding EETT Requirement(s): 6 and 12 (Appendix D).	**Page in District Plan**	**Example of Adequately Addressed**	**Example of Not Adequately Addressed**
a. **Describe the existing hardware, Internet access, electronic learning resources, and technical support already in the district that will be used to support the Curriculum and Professional Development Components (Sections 3 & 4) of the plan.**	**65-78**	The plan clearly summarizes the existing technology hardware, electronic learning resources, networking and telecommunication infrastructure, and technical support to support the implementation of the Curriculum and Professional Development Components.	The inventory of equipment is so general that it is difficult to determine what must be acquired to implement the Curriculum and Professional Development Components. The summary of current technical support is missing or lacks sufficient detail.
b. **Describe the technology hardware, electronic learning resources, networking and telecommunications infrastructure, physical plant modifications, and technical support needed by the district's teachers, students, and administrators to support the activities in the Curriculum and Professional Development Components of the plan.**	**65-78**	The plan provides a clear summary and list of the technology hardware, electronic learning resources, networking and telecommunications infrastructure, physical plant modifications, and technical support the district will need to support the implementation of the district's Curriculum and Professional Development Components.	The plan includes a description or list of hardware, infrastructure, and other technology necessary to implement the plan, but there doesn't seem to be any real relationship between the activities in the Curriculum and Professional Development Components and the listed equipment. Future technical support needs have not been addressed or do not relate to the needs of the Curriculum and Professional Development Components.

c. **List of clear annual benchmarks and a timeline for obtaining the hardware, infrastructure, learning resources and technical support required to support the other plan components as identified in Section 5b.**	**79-82**	The annual benchmarks and timeline are specific and realistic. Teachers and administrators implementing the plan can easily discern what needs to be acquired or repurposed, by whom, and when.	The annual benchmarks and timeline are either absent or so vague that it would be difficult to determine what needs to be acquired or repurposed, by whom, and when.
d. **Describe the process that will be used to monitor Section 5b & the annual benchmarks and timeline of activities including roles and responsibilities.**	**82-83**	The monitoring process, roles, and responsibilities are described in sufficient detail.	The monitoring process either is absent, or lacks detail regarding who is responsible and what is expected.

6. **FUNDING AND BUDGET COMPONENT CRITERIA** Corresponding EETT Requirement(s): 7 & 13, (Appendix D)	**Page in District Plan**	**Example of Adequately Addressed**	**Example of Not Adequately Addressed**
a. **List established and potential funding sources.**	**84**	The plan clearly describes resources that are available or could be obtained to implement the plan.	Resources to implement the plan are not clearly identified or are so general as to be useless.
b. **Estimate annual implementation costs for the term of the plan.**	**85-87**	Cost estimates are reasonable and address the total cost of ownership, including the costs to implement the curricular, professional development, infrastructure, hardware, technical support, and electronic learning resource needs identified in the plan.	Cost estimates are unrealistic, lacking, or are not sufficiently detailed to determine if the total cost of ownership is addressed.
c. **Describe the district's replacement policy for obsolete equipment.**	**87**	Plan recognizes that equipment will need to be replaced and outlines a realistic replacement plan that will support the Curriculum and Professional Development Components.	Replacement policy is either missing or vague. It is not clear that the replacement policy could be implemented.
d. **Describe the process that will be used to monitor Ed Tech funding, implementation costs and new funding opportunities and to adjust budgets as necessary.**	**87-88**	The monitoring process, roles, and responsibilities are described in sufficient detail.	The monitoring process either is absent, or lacks detail regarding who is responsible and what is expected.

7. **MONITORING AND EVALUATION COMPONENT CRITERIA** Corresponding EETT Requirement(s): 11 (Appendix D).	**Page in District Plan**	**Example of Adequately Addressed**	**Example of Not Adequately Addressed**
a. Describe the process for evaluating the plan's overall progress and impact on teaching and learning.	**89**	The plan describes the process for evaluation using the goals and benchmarks of each component as the indicators of success.	No provision for an evaluation is included in the plan. How success is determined is not defined. The evaluation is defined, but the process to conduct the evaluation is missing.
b. Schedule for evaluating the effect of plan implementation.	**90-92**	Evaluation timeline is specific and realistic.	The evaluation timeline is not included or indicates an expectation of unrealistic results that does not support the continued implementation of the plan.
c. Describe the process and frequency of communicating evaluation results to tech plan stakeholders.	**92**	The plan describes the process and frequency of communicating evaluation results to tech plan stakeholders.	The plan does not provide a process for using the monitoring and evaluation results to improve the plan and/or disseminate the findings.

8. **EFFECTIVE COLLABORATIVE STRATEGIES WITH ADULT LITERACY PROVIDERS TO MAXIMIZE THE USE OF TECHNOLOGY CRITERION** Corresponding EETT Requirement(s): 11 (Appendix D).	**Page in District Plan**	**Example of Adequately Addressed**	**Example of Not Adequately Addressed**
If the district has identified adult literacy providers, describe how the program will be developed in collaboration with them. (If no adult literacy providers are indicated, describe the process used to identify adult literacy providers or potential future outreach efforts.)	**93-95**	The plan explains how the program will be developed in collaboration with adult literacy providers. Planning included or will include consideration of collaborative strategies and other funding resources to maximize the use of technology. If no adult literacy providers are indicated, the plan describes the process used to identify adult literacy providers or potential future outreach efforts.	There is no evidence that the plan has been, or will be developed in collaboration with adult literacy service providers, to maximize the use of technology.

9. **EFFECTIVE, RESEARCHED-BASED METHODS, STRATEGIES, AND CRITERIA** Corresponding EETT Requirement(s): 4 and 9 (Appendix D).	**Page in District Plan**	**Example of Adequately Addressed**	**Not Adequately Addressed**
a. Summarize the relevant research and describe how it supports the plan's curricular and professional development goals.	**96-102**	The plan describes the relevant research behind the plan's design for strategies and/or methods selected.	The description of the research behind the plan's design for strategies and/or methods selected is unclear or missing.
b. Describe the district's plans to use technology to extend or supplement the district's curriculum with rigorous academic courses and curricula, including distance-learning technologies.	**102-103**	The plan describes the process the district will use to extend or supplement the district's curriculum with rigorous academic courses and curricula, including distance learning opportunities (particularly in areas that would not otherwise have access to such courses or curricula due to geographical distances or insufficient resources).	There is no plan to use technology to extend or supplement the district's curriculum offerings.

California Department of Education

Appendix J – Technology Plan Contact Information
(Extracted from EETT Request for Application, revised 11/06)

Education Technology Plan Review System (ETPRS)
Contact Information

County & District Code: 1964733

School Code (Direct funded charters only): _ _ _ _ _ _ _

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*Salutation: Dr.

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*Last Name: Sparangis

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*Required information in the ETPRS